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PROGRAM FOR  
**LAND AND WATER RESOURCES DEVELOPMENT**  
OF THE  
**MISSOURI RIVER BASIN**

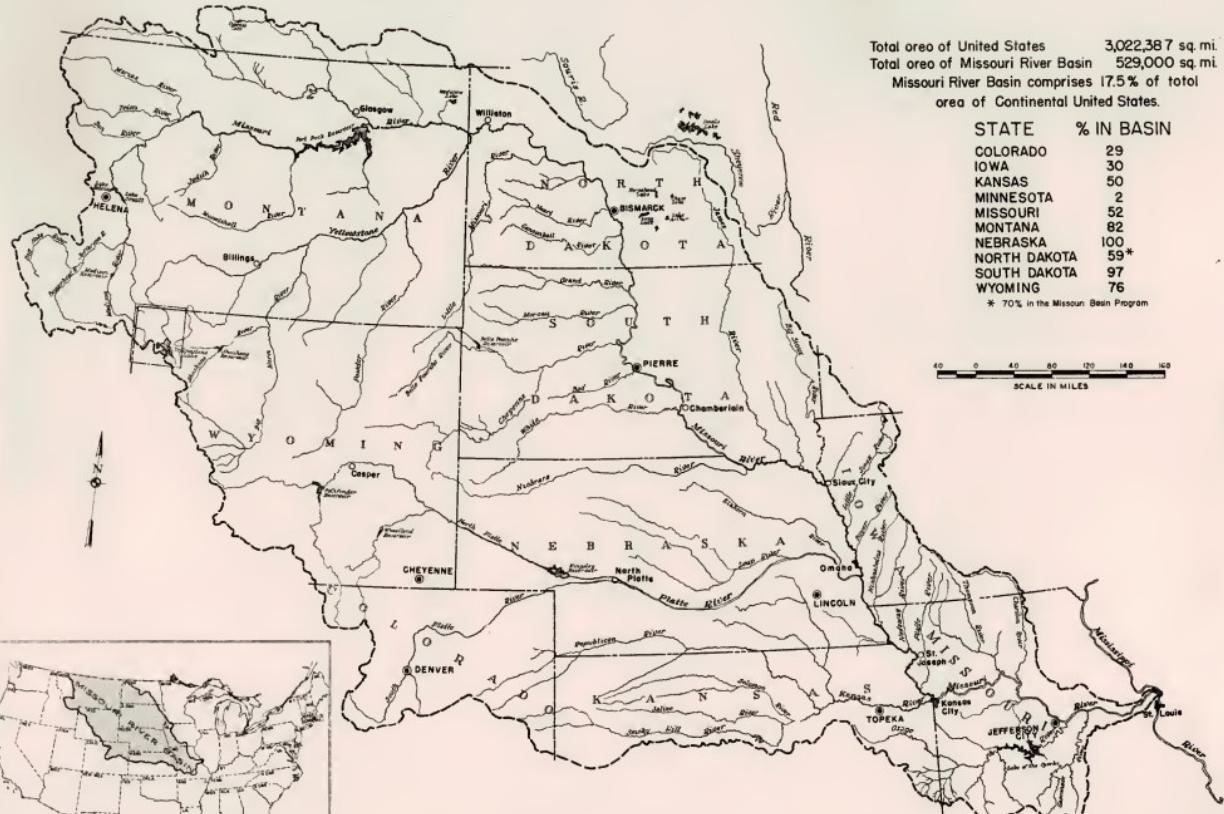
Including the expenditures and estimated requirements  
for the six year period 1953-1958

**MISSOURI BASIN INTER-AGENCY COMMITTEE**  
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MISSOURI RIVER BASIN



SIX-YEAR PROGRAM  
MISSOURI BASIN INTER-AGENCY COMMITTEE

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## SIX-YEAR PROGRAM MISSOURI BASIN INTER-AGENCY COMMITTEE

### PREFACE

The Missouri Basin Inter-Agency Committee was created in April 1945 to provide a means through which the field representatives of the participating Federal Agencies might effectively interchange information and coordinate activities, among themselves and with the Missouri River Basin States, in the preparation of reports and in the planning and execution of works for the control and use of the waters of the Basin and for the development of the Basin's resources. The six-year program is a tool which will assist the Inter-Agency Committee to fulfill part of its responsibility for coordination of activities of the various agencies.

The broad over-all goal of the Missouri Basin Development Program is the full productive use of the land and water resources in a manner that will best meet the needs of the Basin and make the greatest long-time contribution to the strength and progress of the Nation. The objective of the program is to provide a comprehensive, basin-wide development including the expanding of irrigation, conserving and improving the agricultural resources, reducing flood water and sediment damages, furnishing low-cost water transportation, increasing the utilization of the power potential, exploiting and processing the varied mineral resources, enhancing the recreational potentials, providing a base for industrial expansion, safeguarding the quality of water necessary for its many uses, and other allied purposes.

The six-year program is prepared primarily for the use of the Missouri Basin Inter-Agency Committee and sets forth in the tabular sheets in this booklet a schedule for the orderly development of the resources of the Missouri River Basin. It is a revision of previous six-year programs and is subject to further revision annually or periodically as world-wide conditions, national fiscal policies, national and basin needs, or other circumstances may warrant. This program was compiled from data submitted by the States and various Federal Agencies actively participating in the development of the land and water resources of the basin. The rate at which each phase of the program may proceed is indicated by the amount of money programmed for expenditure each year throughout the next six-year period.

Large segments of the program have already been completed and are now serving useful purposes. Completion of some projects is virtually guar-

anteed by appropriations already made. Still other projects are in various stages of construction or planning. Other important portions still await Congressional authorizations. Space does not permit the listing of the status of each phase of works or project in this preface but this can be determined from the appended tables.

The program as given in the tabulation consists of two principal types of activities. The first is the construction or installation of projects and measures and specific items of study or investigation which are subject to delimitation. For these items the report shows a total estimated cost of \$9,384,355,000, an increase of \$865,000,000 over the previous six-year program. The increase is due principally to increased prices. Some items have been added, and some plans modified. A total of \$1,131,668,000 had been expended to the end of fiscal year 1951 and \$265,544,000 is available for expenditure during fiscal year 1952. These amounts constitute 15 percent of the estimated total cost of the program. Many phases have reached actual accomplishment and are being usefully used; many others have been initiated.

The second type of activity which makes up the remaining items of the program consists of investigations, engineering and other technical services, data collection and other supporting services. These are continuing activities. The estimated average cost during the coming six years for this type of activity is \$86,000,000. These items contribute to the planning and design of future development and are essential to the efficient operation of completed works of development. Also included are educational and technical assistance to facilitate realization of optimum benefits.

The objectives, accomplishments and programs of the States and each Federal Agency is briefly discussed in the succeeding sections.

### STATES OF THE MISSOURI BASIN

For many years the States of the Missouri Basin have carried on continuing programs of land and water conservation and development. Many of these programs are in cooperation or conjunction with comparable Federal programs. The work of some State Agencies has been or may be modified to supplement the activities of the various Federal Agencies. In some instances, special state appropriations are now being made for this purpose.



The various state programs are extremely important in spite of the fact that they are small as compared with the Federal programs. They serve, among other things, to coordinate the activities of individuals and Governmental Agencies for the better realization of the immense benefits of the over-all resources-development program.

All States have agricultural programs that include agricultural research, soil surveys, and extension work which contribute to soil and water conservation and development. These are important factors in the productive use of the land and water resources of the Basin. All States have programs for developing game, fish and forestation, as well as parks and recreation. They also have programs of public health and geological investigations which usually include minerals, water resources, and topographic and geologic mapping. Every state carries on a program for industrial development and expansion which is essential for a balanced economy in the Basin. In most instances, where the State has a general over-all state program, a portion of the cost has been included for that portion in the Missouri River Basin.

All States where irrigation is extensively practiced have provisions for administering state water laws; some of them have set up state agencies for the protection, conservation and utilization of their water resources, and, in addition, some of them have irrigation construction programs. Many States engage in special studies related to irrigation, flood control and other resource development.

In the installation of local flood protection works of the Corps of Engineers and the watershed treatment program of the U. S. Department of Agriculture, financial contributions from local interests are required. Such items as levees, local floodways, major gully stabilization and small retarding reservoirs may require local expenditures for modifying locs' highways, drainage works, furnishing rights-of-way, and similar items. The estimate of these costs is given for each state under the item State Government Subdivisions. Also included are estimates of municipal expenditures for pollution abatement, and expenditures of other subdivisions of government.

#### PUBLIC HEALTH SERVICE

The objective of the official health agencies, state and federal, is maximum utilization of the development plan for the improvement of environment as related to health. The program holds much promise for a better environment in localized areas, and for the greater development of the human

resources of the valley concurrent with and following the development of the physical resources of the area. The Public Health Service serves in a consulting capacity in matters relating to public health and water pollution control and, working in close cooperation with the State Health Departments, makes investigations and studies relating to the health aspects of the development program.

As early as 1943 the Public Health Service made a preliminary evaluation of pollution in the lower Missouri River and estimated minimum flows necessary at that time for stream sanitation. In 1947 the Public Health Service became actively interested in the broad features of land and water resource development in the Basin, and inaugurated close liaison with state and federal agencies regarding the health aspects of the development. With the passage of the Federal Water Pollution Act of 1948, and the attendant responsibility of developing, in cooperation with the States, a comprehensive program of water pollution control, the Public Health Service in June 1948 established the Missouri Drainage Basin Office. This action enabled the Public Health Service to facilitate cooperative work with other state and federal agencies interested in the Basin program.

As a result of these cooperative efforts sub-basin investigations of water pollution control in the Kansas, North Platte, Lower Platte, and Niobrara Sub-Basins have already been completed and reports written. Reports are nearing completion on water pollution studies of the Lower Missouri, South Platte, Missouri-Souris, Upper Missouri, Yellowstone, James, Big Sioux, Central Main Stem, Desge-Gasconade, and Grand-Chariton Sub-Basins. With release of these reports, basic work will have been completed preliminary to the development of a comprehensive water pollution control program for the Missouri Basin.

Substantial progress has been made on mosquito control investigations as related to the over-all development program, and during fiscal year 1952 investigations will be inaugurated on individual projects. Activities in fiscal year 1952 will be directed toward the completion and adoption of a comprehensive program of pollution control in cooperation with States, municipalities, and industries. In succeeding years additional emphasis will be placed on enforcement measures where Interstate waters are concerned. The official health agencies will also continue their interest in sanitation of recreational areas and construction camps, municipal and industrial water supply, the sanitary quality of irrigation waters, and other environmental sanitation problems.



The continuation of close cooperation with the planners and contractors of the Missouri River Development Program will make possible the achievement of the objective of the health agencies.

#### FEDERAL POWER COMMISSION

The Commission has jurisdiction over interstate transmission of electric energy and the public utilities engaged therein, and over the interstate transportation and sale of natural gas for resale. The Commission is authorized and directed to make investigations regarding the generation of electric energy, however produced, and its transmission, distribution and sale throughout the United States. The Federal Power Commission is also responsible for recommending jointly with the Corps of Engineers, the provision to be made for generation of hydroelectric power in projects constructed by the Corps of Engineers. The Flood Control Act of 1944, which directs the Secretary of the Interior to sell the hydroelectric power generated at reservoir projects under control of the Department of the Army, provides that the rates at which the power is sold shall be subject to confirmation and approval by the Federal Power Commission.

The role of the Federal Power Commission, as it specifically relates to the Missouri River Basin includes: The licensing of water power developments involving lands or waters of the United States subject to the jurisdiction of the Congress; supervision of licensed projects including periodic inspections of projects under construction and in operation; collection, analysis and publication of statistical and operating data pertaining to the electric power industry, including electric facility maps; general investigations of power requirements and supply, both present and future; the studies of future possibilities of interconnection and coordination of electric power facilities in the interest of economy and strengthening of power supply; studies of potential river development projects and their utilization in the development of hydroelectric power including examination of projects proposed by other agencies to insure the maximum development of hydroelectric power consistent with their other purposes, together with formal recommendations thereto; and studies to determine the manner in which the electric output of the Missouri Basin hydroelectric projects may be used to assist in supplying the power requirements of the Basin and how these projects may best be coordinated with facilities of existing systems.

A valuable contribution to the planning and development of the Basin is the Power Market Survey being made by the Commission, embracing the en-

tire Missouri Basin. The survey is designed primarily to meet the needs of the Commission and other Government agencies, such as the Bureau of Reclamation and Corps of Engineers in their studies of multiple-purpose projects and river-development programs. This survey is in two parts, Part I, which has already been published, deals with the present and estimated future power requirements of the area and the need for additional generating capacity. It has been issued in six sections including power market surveys for five individual areas and a general report for the entire Basin; Part II, which is nearing completion, will indicate the hydroelectric installations most suitable for meeting the Basin's estimated power requirements and how these installations may be most effectively utilized. Basically, it is a general survey of power supply including consideration of hydroelectric installations that are planned or under construction in the Missouri Basin.

The Commission will continue to fulfill its role in the future as it has in the past to forward the planning and development of the Missouri River Basin in cooperation with other Federal Agencies, State, local authorities, and others engaged in regional development activities.

#### UNITED STATES DEPARTMENT OF COMMERCE

The basic function of the Department of Commerce is to foster, promote and develop the nation's commerce, industry and transportation facilities. Its role in the development and stabilization of the economy of the Basin will become increasingly important as the accomplishments of the Basin's development program provide the means and needs for expansion of industry and trade. In addition, the Department acts as liaison between business interests and the Committee, in its deliberations on the development program.

Eight of the bureaus and agencies of the Department of Commerce are directly concerned in carrying out the Department's part in the Basin's development program.

The INLAND WATERWAYS CORPORATION is set up to promote and develop inland water transportation, service and facilities. To this end it operates a common carrier barge service on a number of important inland waterways. In the Basin, it operates from Omaha, Nebraska, to St. Louis, Missouri, on the Missouri River, a service which connects with its other lines to reach from Minneapolis, Minnesota, to New Orleans, Louisiana.

The COAST AND GEODETIC SURVEY, in addition to its task of surveying and charting the coasts of the United States, performs a wide variety of



services for the promotion of commerce and the development of our natural resources, including marine, aeronautical, geodetic, geomagnetic and seismological functions.

The Survey's part in the development of the basin includes surveys for flood control and reclamation studies, determination of geographic positions and elevations to provide a framework for mapping and other engineering work, and the issuance of aeronautical charts for use in air transportation.

The WEATHER BUREAU, through its airways weather service, climatological service, river and flood warning service and general weather service, issued daily weather reports, five-day and thirty-day outlook statements, flood and storm warnings and crop weather reports.

Its work in the Basin is of great importance to agriculture, business and industry, and to the agencies working directly on flood control and other projects. River stages are observed daily, and forecasts are made for the benefit of river navigation. In addition to flood stage forecasts, precipitation measuring stations are maintained, and studies are made to determine the maximum rainfall amounts likely to fall over the Basin. Mountain snowfall stations provide forecasts of runoff from the snow fields for irrigation, flood control and hydroelectric power.

The BUREAU OF THE CENSUS and the OFFICE OF BUSINESS ECONOMICS provide comprehensive statistical data on population, business, agriculture and other aspects of the national economy. They develop basic economic and statistical indicators, and make analyses of the current economic situation and the outlook for the future.

In the development of the Basin they have made and will continue to make economic, industrial and marketing opportunity studies and will also furnish factual information to other groups interested in the Basin's economic development.

The OFFICE OF INDUSTRY AND COMMERCE furnishes information and assistance to businessmen on a large variety of problems, and acts as their representative in the Federal Government. The Office, and particularly its Area Development Division, promotes industry and commerce in the Basin by assisting local, state and regional development organizations in their plans for increasing industrial development, and by analyzing the potentialities of the Basin; and by aiding trade associations and other industry groups through applying the Department's services and information material to their problems.

In addition to these bureaus and agencies, the Bureau of Public Roads, the Civil Aeronautics Administration and the National Production Authority will make a significant contribution to the long range development of the basin. However, their specific contribution to land and water resource development at this time is not considered sufficiently pertinent to include data on their programs.

#### CORPS OF ENGINEERS, U. S. ARMY

The Corps of Engineers is primarily responsible, under law, for flood control and for river and harbor developments in the interests of navigation. In carrying out investigations and construction of works of improvement for these primary responsibilities, other water conservation and water use functions beneficial to the people of the area are also covered. In the development of all its projects the Corps of Engineers works closely with other Federal Agencies, states and local interests.

First work by the Corps of Engineers in the Missouri Basin was initiated in 1824 and consisted principally of snag removal to aid navigation. In 1882 construction of dikes and revetments was started to stabilize the banks of the river. Thus the early work of the Corps was primarily for navigation. However, in 1928 a series of comprehensive studies for navigation, flood control, irrigation and power was assigned to the Corps resulting in the well known "308" reports which formed a basis for Congress to adopt a Federal Policy with respect to flood control. Subsequently work has been carried on primarily for Flood Control and Navigation.

As of the end of Fiscal Year 1951 the Corps of Engineers had expended a total of \$627,484,000 in the basin, which can be broken down as follows:

##### Projects completed or in operation:

Navigation	\$ 797,000
Flood Control	23,730,000
Multiple-purpose	142,541,000

##### Projects under construction:

Flood control exclusively	\$ 48,836,000
Navigation and bank stabilization	192,010,000
Multiple-purpose	215,038,000

##### Investigations and planning

The total cost of the projects which have been completed or on which construction has been initiated amount to \$1,493,805,000 or 57% of the present total program of the Corps as shown in this six-year program.

In addition to the work already initiated, it is anticipated that as a



result of the 1951 floods, much work in the lower basin will be initiated. Completion of the work scheduled in the six-year program in the years 1953 through 1958 will result in protection for an extended area of over one and a half million acres of land against floods equal or exceeding those of past record and a substantial reduction in flood damages for about one million additional acres. The projects will also provide means for the generation of a very large quantity of hydroelectric power, will essentially complete the navigation project from Sioux City to the mouth, provide for the control of the Missouri River and many of its tributaries for useful purposes including navigation, irrigation, recreation, fish and wildlife, municipal water supply, and alleviation of stream pollution.

Upon completion of projects in the program, protection against all floods of record will be provided on the main stem of the Missouri River from Sioux City to the mouth, and the maintenance of a nine-foot channel for navigation will be assured for this same reach. Damages from floods on the major flood-producing streams will be considerably reduced or eliminated; major cities and several other important municipalities will have been provided with protection against floods equal to or in excess of past record. In addition, other functions being carried out will result in extensive benefits including the generation of substantial blocks of power, the storage of flood flows for use in irrigation projects of the Bureau of Reclamation, water supply, stream sanitation, and the development of recreational and wildlife facilities. The over-all flexible program of development will be supplemented or filled in by additional projects which will be authorized by Congress.

#### UNITED STATES DEPARTMENT OF AGRICULTURE

A watershed program for the Missouri River Basin has been recommended to the Congress by the Department of Agriculture (H. D. 373, 81st Congress, 1st Session).

The program includes those additional measures necessary to provide for an integrated and balanced program of development, conservation, and use of the land and water resources of the Missouri River Basin. The watershed program when authorized will complement the flood control, navigation, irrigation, and electric power projects approved in the Flood Control Act of 1944 and other legislation.

The program would be carried out cooperatively by the United States Department of Agriculture, the States, and the Land-Grant Colleges with the 582,000 farmers and ranchers of the Basin, and through soil conservation

districts, watershed districts, and other organized farmer groups. The public will share with private landowners an equitable part of the cost of installing the program. Farmers and ranchers will be given assistance in the form of direct aids, technical assistance including surveys and investigations, education and information, and credit. The program provides for necessary measures to achieve maximum public benefits from public lands under jurisdiction of the Department of Agriculture. The recommended program provides for:

(1) Application of conservation and improvement measures on grassland and cropland to maintain or increase production, reduce erosion, floodwater and sediment damage. Such measures include contour farming, terracing, grassed waterways and outlets, erosion-control structures, livestock water facilities, and seeding and reseeding of grass and cropland.

(2) Development, management and use of forests and forest ranges to increase the multiple benefits from these natural resources. These benefits come from the production of timber for lumber and other wood products, the use of ranges by livestock and wildlife and the establishment of recreational opportunities. In addition, good forest cover serves to preserve sources of water supplies in the mountainous areas, stabilize soil, and retard the rapid runoff from snow-melt and high intensity rain storms.

(3) Stabilizing measures for small watercourses to assure the safe disposal of water in small watersheds and the lesser tributary streams. This can be accomplished through the construction of gully-control structures, floodways, bank protection works, and small retarding basins for flood control, for protection of public investment in large reservoirs and other works, and for protection of land being destroyed by gully-erosion, bank cutting, swamping, and sedimentation.

(4) Assistance in the development of irrigation included in the program authorized under the Flood Control Act of 1944 and in development of other irrigation by State and private projects.

(5) Rehabilitation and improvement of existing drainage systems and the construction of new systems for areas not now properly drained including drainage systems for the farm lands which will be protected by levees authorized in the Flood Control Act of 1944. It is not intended to drain areas whose most beneficial use is for the preservation and enhancement of wildlife resource and for recreation.



(6) Soil surveys and land classification showing the characteristics, productivity, and location of soils to facilitate efficient development, conservation, and use of the land and water resources of the Missouri Basin.

(7) Research and investigations to guide and direct the expanded program of land, forest and water development so as to assure full completion of recommended action program with the least amount of costly trial and error.

(8) Cooperative extension education to develop understanding and active participation in the program of farm families; farm groups; civil and commercial organizations; local, county, and state institutions; and government agencies.

(9) Development and readjustment credit not available under the standards and authorities of present lenders, as necessary to cover requirements of farmers for farm acquisition, improvement and operation; and of groups of farmers for water facilities, soil and water conservation facilities, and marketing and processing facilities. This credit should be made available at times and places to enable farmers to develop their lands concurrently with public programs.

(10) Assistance to rural electrification borrowers in developing plans for extending service to the more sparsely settled farming areas and to make certain that activities under the national rural electrification program are properly related to the basin-wide development program.

To carry out the purposes of this program the Department of Agriculture will annually submit work plans, surveys, or statements giving the details of the proposed work in selected areas. In selecting areas that will be given priority for work plans under the Missouri Basin Agricultural Program, consideration will be given to the national need for agricultural products, the land, forest, and water problems and potential production capacities of the area, the construction plans for Federal projects authorized under the Flood Control Act of 1944 and subsequent legislation, and the ability and willingness of local people to carry out their responsibilities on the proposed work of improvement.

Plans and budgets for soil surveys and land classification, for research and investigations, and for cooperative extension education will be prepared cooperatively by the Department of Agriculture and the Land-Grant Colleges and will set forth the cooperative arrangements under which the

work is to be conducted.

The following nine bureaus of the Department of Agriculture are carrying out some portion of this recommended program for the Missouri Basin under provisions of the nationwide agricultural programs and will be responsible for carrying forward the accelerated watershed program recommended for authorization:

Agricultural Research Administration  
Bureau of Agricultural Economics  
Extension Service  
Farm Credit Administration  
Farmers Home Administration  
Forest Service  
Production and Marketing Administration  
Rural Electrification Administration  
Soil Conservation Service

The estimated total cost of the agricultural program as shown in column two of this report is taken from House Document 373, First Congress and represents the estimated cost of the job in the Missouri Basin as of July 1, 1949. Some of the needs are being met by use of regular funds, the balance will be accomplished only when additional funds are made available for the basin. Column 3 "Costs to end of Fiscal Year 1951" includes expenditures for the two fiscal years 1950 and 1951 from regular appropriations to the Department of Agriculture for a small part of the Missouri Basin program. About 2 percent of the program was accomplished in these two years. Column 4 "1952 Fiscal Year Funds" includes allocations from current appropriations to this Department for items of work covered by the above program. For 1953 fiscal year there are included regular funds for these programs at the same level as 1952 plus a first year complement of Missouri Basin funds of \$5,000,000 apportioned among the various purposes. The additional work scheduled for 1953 would be concentrated in certain critical areas. These critical areas in which the program should be accelerated have been selected in cooperation with state groups and on the basis of criteria indicated above.

In 1954 and subsequent years, expansion into additional areas is contemplated at an accelerated rate. It is expected that the whole program will be completed within a 30-year period.

The estimates included here take into account the national situation, the urgency for increased agricultural production, the imperative need for



protecting and maintaining our soil and water resources, as well as the urgency for bringing the watershed phases into balance with the program of engineering structures.

The rate of accomplishment to meet these urgent needs as set forth in the recommended program is contingent upon Congressional action.

#### UNITED STATES DEPARTMENT OF THE INTERIOR

The Department of the Interior deals primarily with the management, conservation, and development of natural resources. These resources include certain public lands and the Federal range, water and power resources, oil, gas and other mineral resources, certain forest resources, fish and wildlife resources and the National Park system.

In order to fulfill its broad responsibilities, the Interior Department utilizes thirteen agencies and bureaus, each responsible for a particular phase of the Department's work. Seven of its bureaus are directly concerned with the Missouri River Basin Development Program.

The BUREAU OF RECLAMATION'S purpose is to promote the development of agriculture and industrial economies through the utilization of land and water resources. It constructs and operates multiple-purpose projects providing for irrigation, hydroelectric energy, flood control, navigation, domestic and industrial uses, and other purposes.

At the close of fiscal year 1951, twelve major storage dams had been completed in the Missouri River Basin. These include Angostura, Dickinson, Shadhill, Heart Butta, Kortas, Cedar Bluff, Enders, Medicine Creek, Bonny, Olympus, Granby, and Horsetooth. Six more are now under construction including Trenton, Boysen, Canyon Ferry, Keyhole, Willow Creek, and Carter Lake. The total cost of projects which have been completed or on which construction has been started amounts to about \$750,000,000 or about 23% of the total program of the Bureau of Reclamation in the basin.

The program goals for the next six years include:

- (1) The irrigation of 407,000 acres of new land.
- (2) The provision of supplemental water for 752,000 acres of inadequately irrigated land.
- (3) The completion of power plants with an installed capacity of nearly 450,000 kilowatts.

The BUREAU OF INDIAN AFFAIRS was established to discharge the responsibility of the United States for the orderly incorporation of American Indian groups and individuals into the body politic.

The residual land holdings of about 70,000 Plains Indians in the

Missouri River Basin, totals about 15,000,000 acres located in the midat of this great program of resource development.

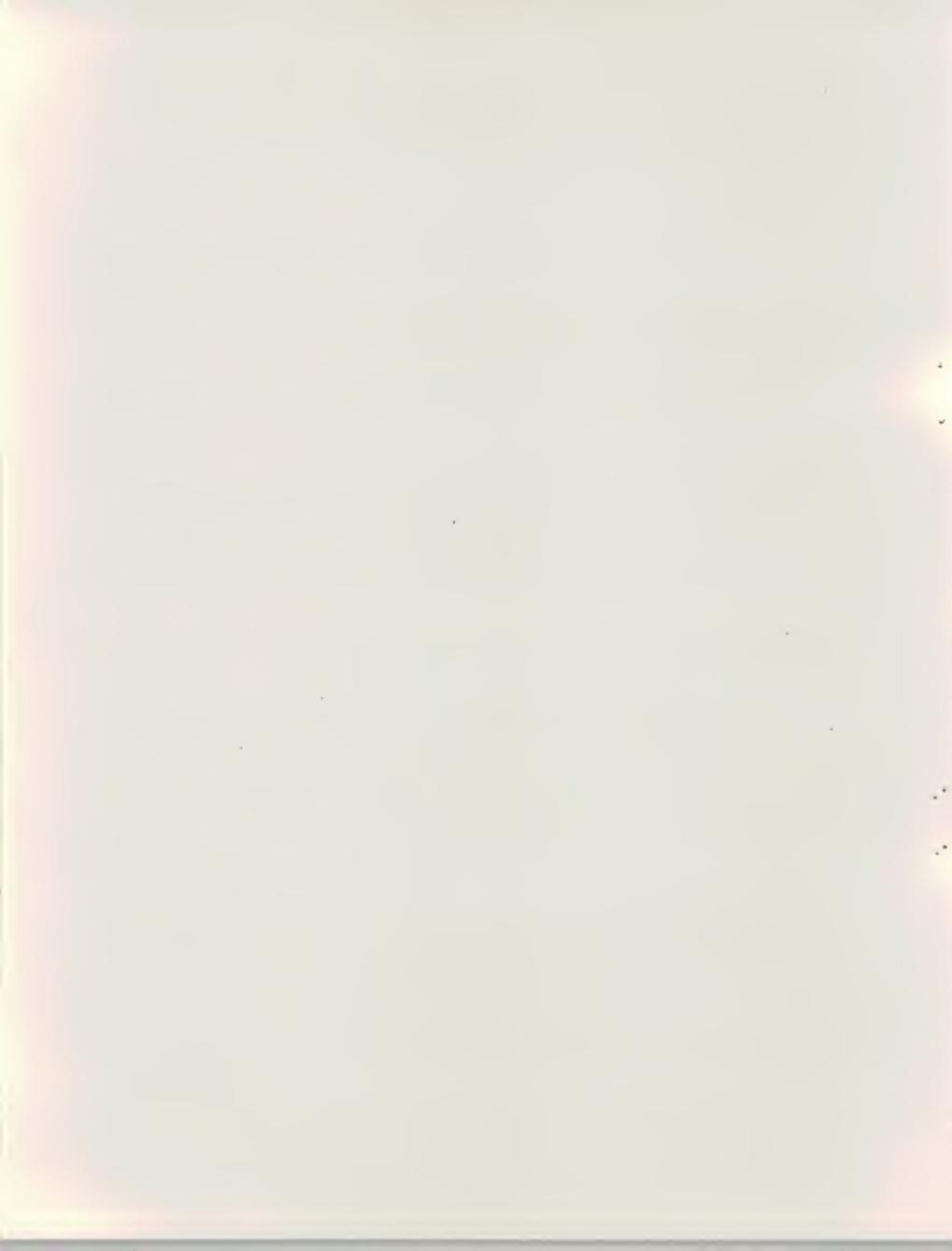
The Six-Year Program of the Bureau of Indian Affairs contained in this publication is geared in part to the anticipated progress of the Bureau of Reclamation and the Corps of Engineers, and is calculated to bring about the integration of the Indian citizen into general community life with particular regard to the changes that will come about in the economy of the Missouri River Basin as a result of the resource development plan.

The BUREAU OF LAND MANAGEMENT is custodian of the remaining 20 million acres of unreserved, unappropriated public domain in the Basin. The management and development or disposition of these lands and their resources to permit their maximum contribution to the local and national economy in a fully coordinated and integrated program for resource development is the primary goal. In addition, the Bureau of Land Management has the authority for providing cadastral surveys which establish the boundaries of the public lands, and form the basis for the legal descriptions of all land in the Basin. It is responsible for mineral leasing on public land and other lands on which the minerals have been reserved to the United States. The suitability of the public domain for farming, grazing, forestry, watershed, recreation, wildlife or combinations of these uses, is being determined under a comprehensive land classification program.

The BUREAU OF MINES is "a bureau of mining, metallurgic, and mineral technology." It promotes safety in the mineral industries and aids conservation of mineral resources. It conducts investigations on the mining, preparation, and utilization of minerals. It seeks to promote the progress of the industry through scientific technology and economic studies in the laboratory and the field.

There are substantial mineral resources in the land drained by the Missouri River. Most of the Nation's solid fuel reserves are in the Missouri River Basin but are being used to a limited degree; the Nation's largest chromite, and perhaps the largest manganese deposits are situated in the Basin. Non-metallic mineral resources, many of which have industrial uses, are being utilized to a very minor degree in the Missouri Basin. Phosphate and sulphur deposits have received only a moderate amount of attention and the Basin's sodium sulphate deposits still await developments.

A tremendous amount of basic information on the location of reserves, quality and treatment process necessary, has been developed for many of the



Basin's major mineral resources. In many cases this work will continue. However, except for occasional reappraisals of reserves as required by changes in industrial and defense demands, future emphasis will be placed on technical-use and economic-use patterns.

The FISH AND WILDLIFE SERVICE is charged with carrying out the provisions of laws designed to increase the stocks of fish and wildlife, resist depletion, disseminate knowledge, and extend the use of these renewable resources.

The far-reaching plans for the development of the basic resources of the Missouri River Basin will result in such drastic changes in land and water utilization that corresponding plans must be developed for the conservation and enhancement of fish and wildlife resources.

It is the responsibility of the Fish and Wildlife Service to study all the units of the Missouri River Basin Project and to report on the ultimate effects of proposed developments on fish and wildlife; to suggest ways by which the reservoirs and the developed areas may be made more productive, and to plan the physical developments requisite to an expanding utilization of game and fish.

The Fish and Wildlife Service supplies reports on planned units before they reach the construction stage. The program of the Fish and Wildlife Service, over the next six-year period, is directed in part to the planned construction progress of the Bureau of Reclamation and Corps of Engineers, and is so programmed as to achieve the greatest fish and wildlife benefit possible from the project in relation to its multi-purpose character.

The GEOLOGICAL SURVEY is primarily fact-finding and research agency. It collects, analyzes, and interprets basic data on the water, mineral, and land resources, and prepares topographic and geologic maps and reports, that are a prerequisite for planning, constructing, and operating projects for the development and utilization of the resources of the Missouri River Basin. It also classifies the public lands as to their mineral content or their value for water power or storage; and it supervises technical operations related to mining, oil, and gas leases on the public, Indian, and naval petroleum reserve lands.

The NATIONAL PARK SERVICE administers the National Parks, monuments and similar reservations in conformity with statutory mandate.

Numerous reservoirs planned for the Missouri River Basin contain a tremendous recreation potential. It is the responsibility of the National Park Service to investigate the recreational possibilities at the proposed

reservoirs, and to recommend the facilities to be installed at reservoirs constructed by the Bureau of Reclamation.

As a part of their program the National Park Service, with the cooperation of the Smithsonian Institution, is now undertaking a "program of archeological and historical survey and recovery" in the Missouri Basin. This program began in 1946, reached a peak of activity in 1951, and should remain at that peak level through 1953, in order to accomplish the major share of the salvage operations necessary.

During the past six years, the National Park Service has prepared individual reservoir and sub-basin reconnaissance reports on all units actively investigated by the Bureau of Reclamation. During the next six years work must be speeded up on some phases of the recreational program.

#### MISSOURI BASIN INTER-AGENCY COMMITTEE

At present the Missouri Basin Inter-Agency Committee is composed of the following representatives from the six participating Federal Agencies and the following five Governors representing the ten Missouri Basin States:

Ben H. Greene, Federal Power Commission	Honorable Val Peterson Governor of Nebraska
Harrell Mosbaugh Department of Interior	Honorable Norman Brundage Governor of North Dakota
Brig. Gen. D. G. Shingler Corps of Engineers	Honorable Sigurd Andanson Governor of South Dakota
Gladwin E. Young Department of Agriculture	Honorable Forrest Smith Governor of Missouri
Charles E. Brokaw Department of Commerce	Honorable John W. Bonner Governor of Montana
Gian J. Hopkins Federal Security Agency	

Publication of the following tabulation by the Missouri Basin Inter-Agency Committee shall not be interpreted as an approval of all features, projects and details of such program. It is understood that the projected works shall be adjusted in the process of coordination of the Basin-wide program.



#### EXPLANATION OF COLUMN HEADINGS

Column 1. Feature or Project (or State or Agency).

Column 1a. "Percent in Basin." Percentage of area of State lying in the Basin, with an appropriate footnote covering parts of States lying outside the Basin, and directly connected with the Basin program, such as North Dakota.

Column 2. "Estimated Total Cost." Estimated total cost for construction of projects, installing measures, related investigations, surveys and other facilitating works for which total costs have been estimated and for which total costs can be estimated. It should be noted that this does not include any of the continuing programs which will continue for indefinite periods.

Column 3. "Costs to end of Fiscal Year 1951." Costs to end of fiscal year 1951 for all phases of the Missouri Basin Development Program. This applies primarily to such projects or programs, listed in column 2, which have readily definable time of initiation.

Column 4. "1952 Fiscal Year Funds." Funds available for expenditure during fiscal year 1952, for all phases of Missouri River Basin Program.

Column 5 to 10 inclusive. "Funds Required by Fiscal Years." These figures based upon estimated needs to carry out the scheduled programs including the construction and installation of projects and measures; supporting and related programs and continuing programs related to land and water resource development being conducted by the various States and agencies cooperating in the Missouri River Basin Program. These figures do not include many maintenance and operation costs on works in operation but do include appropriate administrative costs.

Column 11. "Total Estimated Costs Six-Year Program, 1953-1958." This column shows sums of figures shown in columns 5 to 10 inclusive.

Column 12. "Funds Required After Fiscal Year 1958." Estimated funds required for completion of construction or installation of projects or measures shown in column 2 after fiscal year 1958.



# SUMMARY

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Percent in Basin	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958
					1953	1954	1955	1956	1957	1958		
State of Colorado	29	(e) 16,271		9,478	10,405	11,404	12,403	8,930	6,647	6,862	56,651	29,585
State of Iowa	30	(e) 58,392	4,594	4,061	2,144	2,498	2,647	2,854	3,123	3,318	16,584	57,437
State of Kansas	50	(e) 53,822	2,664	1,398	3,717	2,386	4,539	2,168	2,520	2,725	18,055	53,315
State of Minnesota	2	(e) 1,069					17	35	53	75	180	889
State of Missouri	52	(e) 49,460	135	3,593	4,216	4,820	5,371	5,183	6,011	5,805	31,406	43,849
State of Montana	82	(e) 28,669	676	1,796	2,698	3,173	3,852	3,359	3,525	3,720	20,327	28,367
State of Nebraska	100	(e) 100,686	1,112	3,545	5,740	7,551	9,019	11,437	7,205	7,612	48,564	97,263
State of North Dakota (a)	52	(e) 31,725	6,056	3,081	3,857	3,514	3,655	3,048	3,221	3,437	20,732	30,169
State of South Dakota	97	(e) 58,420	2,782	3,594	4,365	3,292	3,380	3,745	3,936	4,003	22,721	36,476
State of Wyoming	76	(e) 21,390		2,817	1,838	2,039	2,632	2,356	2,159	2,199	13,223	20,666
Public Health Service				(b) 135	153	163	197	208	250	250	1,221	
Federal Power Commission				170	170	192	211	231	260	260	1,324	
Department of Commerce				3,482	2,784	3,051	4,008	4,034	3,284	3,104	2,996	20,477
Corps of Engineers		2,737,868	627,464	(aa) 143,486	150,010	199,803	213,553	174,920	145,276	120,725	1,004,287	960,621
Department of Agriculture		3,032,867	62,723	32,711	37,715	48,479	64,945	90,717	104,658	120,423	466,937	2,470,496
Department of Interior		(c) 3,193,716	438,996	108,727	166,589	197,014	211,564	218,980	209,005	207,832	1,210,984	1,732,898
<b>GRAND TOTAL</b>		<b>9,384,355</b>	<b>1,150,684</b>	<b>323,376</b>	<b>396,668</b>	<b>490,336</b>	<b>541,919</b>	<b>531,455</b>	<b>500,953</b>	<b>492,342</b>	<b>2,953,673</b>	<b>5,563,031</b>

**SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN** prepared by **MISSOURI BASIN INTER-AGENCY COMMITTEE**  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Redd. after F.Y. 1958
				1953	1954	1955	1956	1957	1958		
Department of Commerce		(3,482)	(2,784)	(3,051)	(4,008)	(4,034)	(3,284)	(3,104)	(2,996)	(20,477)	
Coast and Geodetic Survey	395	489	627	606	536	513	432	400	3,114		
Weather Bureau	290	294	644	849	945	1,018	1,073	972	5,501		
Inland Waterways Corporation (d) (e)	300	300	300	300	300	300	300	300	300	1,800	
Economic Information, Studies & Survey	(f) 2,497	(g) 1,701	(h) 1,480	(i) 2,253	(j) 2,253	(k) 1,453	(l) 1,299	(m) 1,324		10,062	
Department of Agriculture	(3,032,867)	(62,723)	(32,711)	(37,715)	(48,479)	(64,945)	(90,717)	(104,658)	(120,423)	(466,937)	(2,470,496)
Program of Conservation & Improvement Measures for Grassland and Cropland	1,189,630	47,560	24,935	26,935	30,585	36,900	50,576	54,750	60,348	260,094	857,041
Program for Forest and Forest Range Lands	464,448	6,069	3,825	4,755	6,825	12,137	15,155	17,695	19,420	75,987	378,567
Program for Stabilizing Measures for Small Watercourses	1,005,400	1,997	340	940	3,290	5,180	10,620	15,930	21,924	57,884	945,179
Program in Aid of Irrigation	201,310	3,603	1,821	2,021	2,321	3,351	4,051	5,901	7,651	25,296	170,590
Program to Improve Drainage on Agricultural Lands	31,942	2,051	1,003	1,003	1,203	1,515	1,835	2,286	2,485	10,327	18,561
Program of Soil Surveys and Land Classification	28,620	295	145	345	745	1,000	1,300	1,300	1,300	5,990	22,190
Program of Research and Investigation	51,305	1,148	642	1,446	3,042	4,066	5,989	5,402	5,580	25,525	23,990
Program of Extension Education	60,074			200	400	796	1,191	1,394	1,715	5,696	54,378
Supporting Credit Program (Administrative Only) (1)	(30,300)				(250)	(675)	(1,185)	(1,380)	(1,610)		
Rural Electrification (Special Studies only)	138			70	68					138	
Department of the Interior	(3,193,716)	(438,996)	(108,727)	(166,589)	(197,014)	(211,564)	(218,980)	(209,005)	(207,832)	(210,984)	(1,934,026)
Bureau of Reclamation - Region 6	2,018,615	173,015	41,369	67,579	96,949	106,629	119,709	109,311	124,246	624,423	1,179,808
Bureau of Reclamation - Region 7	1,122,127	257,570	41,329	48,331	48,250	53,628	46,902	47,698	34,187	278,996	745,362
U. S. Geological Survey (m)			4,545	8,966	9,232	9,454	9,965	10,300	10,521	58,438	
Fish and Wildlife Service		1,964	4,741	7,341	5,894	5,536	5,417	5,274	5,181	34,643	
Bureau of Land Management	13,973	3,865	1,287	2,380	2,941	3,009	3,282	3,578	3,798	18,988	7,349
Bureau of Mines (n)			1,402	3,028	2,444	2,442	2,405	2,409	2,427	15,155	
Bureau of Indian Affairs		1,507	12,365	24,359	24,235	25,154	25,358	24,574	21,933	145,613	
Ntl. Park Service & Smithsonian Inst.	39,001	1,075	1,689	4,605	7,069	5,712	5,342	5,361	5,539	34,728	1,509

### SUMMARY BY STATES

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Percent in Basin	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958
					1953	1954	1955	1956	1957	1958		
Total for State of Colorado	29	(c) 507,535	146,249	34,904	38,201	31,596	37,701	35,264	32,865	30,718	206,345	214,810
Total for State of Iowa	30	(c) 424,225	19,529	7,545	6,843	9,301	12,978	14,692	14,923	16,112	75,349	351,565
Total for State of Kansas	50	(c) 937,871	61,430	22,078	32,592	51,237	57,762	61,549	44,179	35,009	282,328	603,151
Total for State of Minnesota	2	(c) 19,636	449	441	456	503	1,068	1,296	1,445	1,661	6,429	14,250
Total for State of Missouri	52	(c) 1,068,698	110,451	15,401	28,668	34,729	41,288	45,596	49,942	54,939	255,162	731,000
Total for State of Montana	82	(c) 1,471,682	190,505	28,086	46,867	75,769	103,983	103,288	81,846	86,314	498,067	863,052
Total for State of Nebraska	100	(c) 1,695,345	232,981	42,845	47,923	68,713	74,413	77,527	80,106	67,212	415,894	1,078,226
Total for State of North Dakota (a)	59	(c) 1,078,493	135,972	62,161	67,407	73,802	67,922	49,409	51,270	53,315	363,125	593,529
Total for State of South Dakota	97	(c) 1,442,800	124,744	85,056	94,138	100,646	95,066	87,140	88,344	87,566	552,900	769,934
Total for State of Wyoming	76	(c) 738,070	128,374	24,859	33,573	43,540	49,738	55,694	56,033	59,496	298,074	342,514
Not Distributed by States (Dept. of Agr.)		(c) 30,300										
GRAND TOTAL		9,414,655	1,150,684	323,376	396,668	490,336	541,919	531,455	500,953	492,342	2,953,673	5,563,031

## COLORADO

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
STATE OF COLORADO												
Agricultural Program												
Agricultural Extension Service			128	135	135	135	135	135	135		810	
Agricultural Experiment Station			140	140	160	180	195	195	195		1,065	
Game and Fish Department (o)			593	639	641	732	696	634	631		3,973	
Administration of State Forest Lands			8	8	8	8	8	8	8		48	
Geological Investigations												
Underground Water			10	10	10	10	10	10	10		60	
Minerals			5	5	5	5	5	5	5		30	
Public Health			3	3	3	3	3	3	3		18	
Administration of State Water Laws			114	114	114	114	114	114	114		684	
Water Resources Development												
Studies and Research			40	40	40	40	40	40	40		240	
Subtotal			1,041	1,094	1,116	1,227	1,206	1,144	1,141		6,928	
State Government Subdivisions												
Flood Control	3,603			10	107	1,473	350	350	300		2,590	1,013
Municipal Pollution Abatement			180	450	500	600	897	897	897		4,241	1,794
Watershed Treatment Works (r)	12,668			53	157	175	224	264	399		1,272	11,396
Municipal Water Resources Development			7,852	8,361	9,053	8,428	5,718	3,451	3,584		38,595	15,382
Administration - No. Colo. Water Conservancy District			35	35	40	40	40	45	45		245	
Subtotal	16,271		8,067	8,909	9,857	10,716	7,229	5,007	5,225		46,943	29,585
Federal Grant-in-Aid												
Agricultural Extension Service			127	134	134	134	134	134	134		804	
Agricultural Experiment Station			238	263	292	320	355	355	355		1,940	

## COLORADO

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd Offer F.Y. 1958
				1953	1954	1955	1956	1957	1958		
STATE OF COLORADO (Continued)											
Federal Grant-in-Aid (Continued)											
Public Health			5	5	5	6	6	7	7	36	
Subtotal			370	402	431	460	495	496	496	2,780	
Subtotal - State of Colorado	16,271		9,478	10,405	11,404	12,403	8,930	6,647	6,862	56,651	29,585
PUBLIC HEALTH SERVICE											
Water Pollution Control			4	5	9	6	6	6	6	40	
Mosquito Control Investigations			5	5	5	5	10	10	10	45	
Subtotal - Public Health Service			9	10	10	11	6	19	19	85	
FEDERAL POWER COMMISSION											
River Basin Surveys			7	5	9	9	10	11	11	56	
Power Requirements and Supply			9	9	9	9	7	6	8	39	
Licensed Project Work			2	2	3	3	3	3	3	17	
Subtotal - Federal Power Comm.			14	14	16	18	20	22	22	112	
DEPARTMENT OF COMMERCE											
Coast and Geodetic Survey		5	75	100	75	30	8	4		217	
Weather Bureau											
Flood Forecasting and Water Supply Forecasting Service		9	9	18	22	27	32	36	35	170	
Hydroclimatic network		4	4	9	12	14	17	20	18	90	
Basic data processing and analysis		2	2	6	8	8	8	8	4	42	
Supporting services		2	2	10	15	15	15	15	15	85	

COLORADO

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

## COLORADO

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
<b>DEPARTMENT OF AGRICULTURE (Continued)</b>												
Program of Research and Investigation	5,130	186	137	178	256	369	605	583	612	2,603	2,204	
Program of Extension Education	4,205			40	50	63	83	98	120	454	3,751	
Supporting Credit Program (Administrative only)												
Rural Electrification (Special Studies only)		5									5	
Subtotal - Dept. of Agriculture	180,155	3,486	2,000	3,246	4,571	5,493	6,765	7,529	8,787	36,391	138,278	
											5	
<b>DEPARTMENT OF THE INTERIOR</b>												
Bureau of Reclamation - Region 7												
Narrows	39,310	1,075	185	2,910	6,515	6,650	6,100	5,800	2,166	30,141	7,909	
St. Francis (also Kansas)	15,271	13,403	91	169	204	848	394	1	2	1,618	159	
North Republican Unit	2,238										2,238	
Colorado-Big Thompson Proj.	157,624	113,082	21,500	17,300	2,600						19,900	3,142
Subtotal	214,443	127,560	21,776	20,379	9,319	7,498	6,494	5,801	2,168	51,659	13,448	
U. S. Geological Survey												
Topographic Surveys and Mapping			180	400	400	300	310	220	230		1,860	
Geologic and Mineral Resource Surveys and Mapping			46	88	87	94	106	107	107		589	
Water Resources Investigations			111	256	287	294	296	301	298		1,732	
Classification of Lands			10	15	17	19	22	22	24		119	
Supervision of Mining and Oil and Gas Leases			42	50	55	60	63	73	73		374	
Subtotal			389	809	846	767	797	723	732		4,674	

# COLORADO

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR (Continued)												
Fish and Wildlife Service												
Management of Fish and Wildlife Resources												
Administration of Fish and Game Laws			5	7	7	7	7	8	7	43		
Propagation and Distribution of Food Fishes			12	13	14	14	15	15	15	86		
Mammal and Bird Reservations			5	38	46	46	46	51	51	278		
Control of Predatory Animals and Injurious Rodents			18	41	41	41	40	40	40	243		
Investigation of Fish and Wildlife Resources												
Research on Fish and Fisheries			6	25	10	8	8	8	8	67		
Research on Birds and Mammals			88	113	114	115	116	117	118	693		
Construction												
National Wildlife Facilities			100	580	200	200	200	200	200	1,590		
Federal Aid in Wildlife Restoration			124	124	124	124	124	124	124	744		
Federal Aid to Sportfishing			26	26	26	26	26	25	25	154		
Regional Office Administration			8	24	14	14	14	14	14	94		
River Basin Studies												
Cooperation with Corps of Engineers		1		3	3	3	3	4	3	19		
Cooperation with Bureau of Reclamation		51	12	20	21	21	21	22	21	126		
Basin-Wide Studies		29	3	12	13	4	6	3	4	42		
Subtotal		81	407	1,026	633	623	626	631	630	4,169		
Bureau of Mines												
Fuels												
Coal (q)				75	189	190	190	195	195	200	1,159	
Petroleum and Gas				15	75	70	60	60	60	60	385	

## COLORADO

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958
				1953	1954	1955	1956	1957	1958		
DEPARTMENT OF THE INTERIOR (Continued)											
Bureau of Mines (Continued)											
Minerals and Metals											
Ferrous Metals			1	31	16	16	16	18	18	115	
Nonferrous Metals			1	2	2	3	3	3	4	17	
Nonmetallic Minerals			55	77	77	77	77	77	78	463	
Control of Coal Deposit Fires			20	20	20	20	20	20	20	120	
Health and Safety			35	40	40	40	41	41	41	243	
Administration			18	21	22	22	23	23	24	135	
Subtotal			220	455	437	428	435	437	445	2,637	
Bureau of Land Management											
Management of Lands and Resources											
Grazing			5	20	20	17	17	15	15	104	
Forestry			1	2	2	2	2	2	2	12	
Resource Development and Rehabilitation											
Soil and Moisture Conservation			11	20	20	20	25	27	27	139	
Range Improvement			1	1		1			1	3	
Fire Control			1	1	1	1	1	1	1	6	
Lease and Disposal of Lands and Resources			2	10	10	10	10	10	10	60	
Land Classification and Resource Inventory											
Regular Program			1	2	2	2	2	2	1	11	
Special MRB Program	40	21	6	7	6					13	

## COLORADO

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

**COLORADO**

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

## IOWA

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
<b>STATE OF IOWA</b>												
Agricultural Development			375	375	375	375	375	375	375	2,250		
Highways		128	220	220	220	220	220	220	220	1,320		
Conservation Commission		3,200	525	300	300	300	300	300	300	1,800	1,000	
Soil Conservation Committee		500	300	300	500	500	500	500	500	2,800		
Public Health Engineering - State Funds			12	14	24	24	24	24	24	134		
Federal Grants in Aid for Public Health			15	15	15	15	15	15	15	90		
Flood Control and Natural Resources		20	15	15	20	20	20	20	20	115		
Mine Inspection			4	4	5	5	5	5	5	29		
Geological Survey			27	30	30	30	30	30	30	180		
Development Commission			32	27	27	27	27	27	27	162		
Subtotal		3,848	1,525	1,300	1,516	1,516	1,516	1,516	1,516	8,880	1,000	
<b>State Government Subdivisions</b>												
Flood Control	2,090	746	75	300	425	230	160	150		1,265	4	
Watershed Treatment Works (p)	56,302		87	87	157	501	778	1,057	1,402	3,982	52,233	
Municipal Sewage Treatment			2,374	457	400	400	400	400	400	2,457	4,200	
Subtotal	58,392	746	2,536	844	982	1,131	1,338	1,607	1,802	7,704	56,437	
Subtotal - State of Iowa	58,392	4,594	4,061	2,144	2,498	2,647	2,854	3,123	3,318	16,584	57,437	
<b>PUBLIC HEALTH SERVICE</b>												
Water Pollution Control			5	6	6	8	8	11	11	50		
Mosquito Control Investigations					1					1		
Subtotal - Public Health Service			5	6	7	8	8	11	11	51		

## IOWA

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
<b>FEDERAL POWER COMMISSION</b>												
River Basin Surveys			5	5	6	7	7	8	8		41	
Power Requirements and Supply Studies			4	4	5	5	6	7	7		34	
Licensed Project Work			2	2	2	2	2	2	2		12	
Subtotal - Federal Power Comm.			11	11	13	14	15	17	17		87	
<b>DEPARTMENT OF COMMERCE</b>												
Coast and Geodetic Survey	28	4	4	72	115	71	85				347	
Weather Bureau												
Flood Forecasting Service	14	14	18	22	25	30	34	32			161	
Hydroclimatic Network	2	2	4	6	7	9	10	9			45	
Basic Data Processing & Analysis	2	2	7	10	10	10	10	10			52	
Supporting Services	2	2	10	16	16	16	16	16			90	
Inland Waterways Corporation (See under Missouri)												
Economic Information, Studies and Surveys	237	162	141	214	214	138	123	126			956	
Subtotal - Dept. of Commerce	285	186	184	340	387	274	278	188			1,651	
<b>CORPS OF ENGINEERS</b>												
Sioux City	1,100	1		50	500	549					1,099	
Council Bluffs	2,450	2,305	145									
Little Sioux River	4,100	149	3	1,000	1,500	1,448					3,948	
Missouri River Agricultural Levees	15,505	6,150	1,020	1,000	2,000	2,000	2,000	1,000	335		8,335	

## IOWA

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
CORPS OF ENGINEERS (Contd.)												
Denison	62	4										58
Examination and Surveys	600	375		70	50	20					140	85
Nishnabotna	236	236										
Big Sioux Harbor	758											758
Tributaries of Missouri River	30,000											30,000
Subtotal - Corps of Engineers	54,811	9,220	1,168	2,070	3,600	3,968	2,549	1,000	335	13,522	30,901	
DEPARTMENT OF AGRICULTURE												
Program of Conservation and Improvement Measures for Grassland and Cropland	118,963	2,759	1,429	1,429	1,829	3,190	5,057	5,475	6,035	23,015	91,760	
Program for Forest and Forest Range Lands	10,025	25	15	15	115	203	263	314	348	1,258	8,727	
Program for Stabilizing Measures for Small Watercourses	160,864	1,916	250	250	450	1,430	2,220	3,020	4,010	11,380	147,318	
Program to Improve Drainage on Agricultural Lands	11,499	580	220	220	320	435	506	727	820	3,028	7,671	
Program of Soil Surveys and Land Classification	1,580	10	10	10	35	40	70	70	70	295	1,265	
Program of Research and Investigation	2,052	60	20	64	99	138	223	199	219	942	1,030	
Program of Extension Education	6,007				45	65	131	139	172	552	5,455	
Subtotal - Dept. of Agriculture	310,990	5,350	1,944	1,988	2,893	5,501	8,470	9,944	11,674	40,470	263,226	
DEPARTMENT OF THE INTERIOR												
U. S. Geological Survey												
Topographic Surveys and Mapping			15	215	215	215	230	240	260		1,375	
Water Resources Investigations			24	64	68	74	93	106	111		516	
Subtotal			39	279	283	289	323	346	371		1,891	

## IOWA

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IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Req'd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR (Contd)												
Fish and Wildlife Service												
Management of Fish and Wildlife Resources												
Administration of Fish & Game Laws			5	5	4	9	9	9	7	37		
Mammal and Bird Reservations								26	27	27	80	
Control of Predatory Animals and Injurious Rodents			3	3	3	4	4	4	4	22		
Investigations of Fish and Wildlife Resources												
Research on Fish and Fisheries				15	12	9	9	9	9	63		
Research on Birds and Mammals				6	6	6	6	7	7	7	39	
Construction												
National Wildlife Facilities								15	16	16	47	
Federal Aid in Wildlife Restoration			80	79	79	79	79	80	80	80	476	
Federal Aid to Sportfishing			19	19	19	19	19	19	19	20	115	
Regional Office Administration			1	1	1	1	2	2	2	2	9	
River Basin Studies												
Cooperation with Corps of Engineers	49	7	5	5	5	5	5	5	4	29		
Cooperation with Bureau of Reclamation			1									
Basin-Wide Studies	30	3	7	13	13	6	10	5	54			
Subtotal	80	124	140	144	141	178	187	181	971			
Bureau of Land Management												
Land Classification and Admin. Service (Also Missouri)	4			1	1		1			3	1	

IOWA

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

## KANSAS

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958
				1953	1954	1955	1956	1957	1958		
STATE OF KANSAS											
Agricultural Extension Service (t)			470	599	643	687	698	794	794	4,215	
Agricultural Experiment Stations (t)			115	115	189	189	189	189	189	1,060	
Game, Fish, Forestation and Parks			150	150	150	150	150	150	150	900	
Geological Investigations											
Topographic Mapping			14	14	14	14	14	14	14	84	
Industrial Minerals			30	30	30	32	32	32	32	188	
Ground Water			16	17	17	18	18	18	18	106	
Mineral Fuels			22	22	23	23	23	23	23	137	
Basic Geology			16	17	18	18	18	17	17	102	
Adm. Land and Water Resource Development			54	54	55	55	55	55	55	329	
Public Health											
State Funds			74	74	74	74	74	74	74	444	
Federal Grants-in-Aid			12	12	12	12	12	12	12	72	
Subtotal			973	1,104	1,224	1,271	1,282	1,378	1,378	7,637	
State Government Subdivisions											
Municipal Pollution Abatement				2,000	600	2,800	200	200	200	6,000	7,000
Flood Control	5,261	2,664	425	560	387	275	200	200	100	1,722	450
Watershed Treatment Works (p)	48,561			53	175	193	486	742	1,047	2,696	45,865
Subtotal	53,822	2,664	425	2,613	1,162	3,268	886	1,142	1,347	10,418	53,315
Subtotal - State of Kansas	(c) 53,822	2,664	425	3,717	2,386	4,539	2,168	2,520	2,725	18,055	53,315

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SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

# KANSAS

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
CORPS OF ENGINEERS												
Missouri River Agricultural Levees	13,200	966	235	1,000	1,500	2,200	3,000	2,200	2,099	11,999		
Osage Basin	50,000										50,000	
Kansas Basin	91,100											91,100
Minor Tributaries of Missouri River	5,461											5,461
Milford Reservoir, Republican River, Kansas	35,600		150	1,500	3,000	5,000	8,000	10,000	7,950	35,450		
Maryaville, Big Blue River, Kansas	310		20	200	90						290	
Abilene, Smoky Hill River	400		40	200	160						360	
Perry Reservoir, Delaware River	16,376		200	1,000	4,500	5,000	5,676				16,176	
Malvern Reservoir, Marais des Cygnes River	18,200		300	1,500	5,000	6,000	4,000	1,400			17,900	
Kanopolis Reservoir	12,167	11,898	175	94								94
Kansas Citys (Also Missouri)	43,805	24,289	10,528	4,000	2,988							6,988
Tuttle Creek Reservoir	79,132	213	5,000	10,500	17,000	20,000	20,000	6,419			73,919	
Pioneer Reservoir (Colorado & Kansas)	17,358	93	88									17,177
Examinations and Surveys	380	250		50	20							70
Topeka, Kansas	2,649	738	70	1,000	841							1,841
Salina, Smoky Hill River, Kansas	1,235		75	750	410							1,160
Subtotal - Corps of Engineers	385,373	38,447	16,881	21,794	35,509	38,200	40,676	20,019	10,049	166,247	163,798	
DEPARTMENT OF AGRICULTURE												
Program of Conservation & Improvement Measures for Grassland and Cropland	166,549	4,484	2,191	2,691	3,291	4,166	7,080	7,665	8,448	33,341	126,533	
Program for Forest and Forest Range Lands	11,276	29	30	130	380	400	460	311	345	2,026	9,191	
Program for Stabilizing Measures for Small Watercourses	138,745			150	500	550	1,390	2,120	2,990	7,700	131,045	
Program in Aid of Irrigation	6,516	56	34	34	34	34	41	59	77	279	6,147	

KANSAS

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IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Req'd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
<b>DEPARTMENT OF AGRICULTURE (Contd)</b>												
Program to Improve Drainage on Agricultural Lands	1,917	104	51	51	51	116	202	229	224	873	889	
Program of Soil Surveys and Land Classification	3,100	27	17	26	60	105	140	140	140	611	2,445	
Program of Research & Investigation	6,157	73	52	197	687	695	698	597	627	3,501	2,531	
Program of Extension Education	6,007			50	65	86	155	182	222	760	5,247	
Rural Electrification (Special Studies only)	15				15						15	
Subtotal - Dept. of Agriculture	340,282	4,773	2,375	3,329	5,083	6,152	10,166	11,303	13,073	49,106	284,028	
<b>DEPARTMENT OF THE INTERIOR</b>												
Bureau of Reclamation - Region 7												
Cedar Bluff	18,675	14,393	480	223	344	1,050	1,051	533	2	3,203	599	
Kirwin	18,187	355	125	2,200	6,296	6,025	2,542	243	5	17,311	396	
Kanopolis	6,067						200	500	2,700	3,400	2,667	
Wilson	14,869										14,869	
Webster	14,881			23	200	300	3,000	6,000	4,000	13,523	1,358	
Benkelman Unit	2,410			20	10	100	300	1,500	480	2,410		
Glen Elder Unit	24,273							200	600	800	23,473	
Blue Division (also Nebraska)	12,900										12,900	
Kansas Division	25,628										25,628	
Kaw Division	20,000										20,000	
Bostwick (See Nebraska)												
Subtotal	157,890	14,748	605	2,466	6,850	7,475	7,093	8,976	7,787	40,647	101,890	

## KANSAS

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Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Req'd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR (Contd)												
U. S. Geological Survey												
Topographic Surveys and Mapping			120	230	220	220	240	250	275	1,435		
Geologic and Mineral Resource Surveys and Mapping			59	112	111	120	135	136	136	750		
Water Resources Investigations			97	230	255	264	278	289	290	1,606		
Classification of Lands			3	4	4	4	4	4	4	24		
Supervision of Mining and Oil and Gas Leases			9	10	10	12	12	14	14	72		
Subtotal			288	586	600	620	669	693	719	3,887		
Fish and Wildlife Service												
Management of Fish and Wildlife Resources												
Administration of Fish & Game Laws			4	4	4	5	4	4	4	25		
Propagation and Distribution of Food Fishes			11	11	12	12	13	13	13	74		
Mammal & Bird Reservations			1	4	5	5	5	5	5	29		
Control of Predatory Animals & Injurious Rodents				10	20	20	30	30	31	141		
Investigations of Fish and Wildlife Resources												
Research on Fish and Fisheries				10	8	8	9	9	9	53		
Construction												
Fish Facilities			5									
National Wildlife Facilities				32	31	20	15	5	5	108		
Federal Aid in Wildlife Restoration			107	107	107	107	107	107	108	643		
Federal Aid to Sportfishing			25	25	25	25	25	26	26	152		
Regional Office Administration			5	6	6	6	6	6	5	35		

## KANSAS

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IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
<b>DEPARTMENT OF THE INTERIOR (Contd)</b>												
Fish and Wildlife Service (Contd)												
River-Basin Studies												
Cooperation with Corps of Engineers	79	10	5	5	5	5	5	5	5	30		
Cooperation with Bureau of Reclamation	73	21	28	30	30	31	33	30	30	182		
Cooperation with U.S. Dept. of Agriculture												
Basin-Wide Studies	60	16	21	23	24	9	18	7	102			
Subtotal	212	205	263	276	267	259	261	248	1,574			
Bureau of Mines												
Fuels												
Coal (q)				5	5	5	5			20		
Petroleum and Gas				10	10	10	13	13	13	69		
Minerals and Metals												
Nonmetallic Minerals		6	6	6	6	6	6	6	6	36		
Health and Safety		10	10	10	10	10	10	10	10	60		
Administration		3	3	3	3	3	3	3	3	18		
Subtotal		19	34	34	34	37	32	32	203			
Bureau of Land Management												
Lease of Lands and Land Classification	2	2	1	1	1		1			3		
Cadastral Surveys												
Regular Program			2	1	1	1	1	1	1	6		
Special M&B Program		44	15	15	14	14	17	20	20	100		
Administrative Services				1		1				2		
Subtotal		2	46	18	18	16	16	19	21	111		

## KANSAS

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IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958
				1953	1954	1955	1956	1957	1958		
DEPARTMENT OF THE INTERIOR (Continued)											
National Park Service											
Activities with Program -- Bureau of Reclamation											
Planning and Investigation	203	57	12	16	16	16	16	16	14	94	40
Construction (r)	(531)	(4)	(21)	(44)	(80)	(13)	(29)	(35)		(201)	(305)
Construction Planning and Consultant Services	71			5	12	1	4	4		26	45
Historical & Archeological Surveys and Salvage	53	8	5	10	10	2	3	2	3	30	10
Activities with Program -- Corps of Engineers											
Planning and Advisory Services	6	2		1		1	1	1		4	
Historical & Archeological Surveys and Salvage	8	8									
Basin-Wide Survey	82	1	2	8	28	22	9	6	6	79	
Development and Management	30			4	5	4	4	4	4	25	5
Smithsonian Institution											
Activities with Program -- Bureau of Reclamation											
Investigations	28	6	2	2	3	2	3	2	3	15	5
Excavations	5										5
Activities with Program -- Corps of Engineers											
Investigations	16	2	4								10
Subtotal	502	84	25	46	74	48	40	35	30	273	120
Subtotal - Dept. of the Interior	158,394	15,090	1,160	3,413	7,850	8,460	8,117	10,018	8,837	46,695	102,010
TOTAL - STATE OF KANSAS	937,871	61,430	22,078	32,592	51,237	57,762	61,549	44,179	35,009	282,328	603,151

## **MINNESOTA**

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
STATE OF MINNESOTA												
State Government Subdivisions												
Watershed Treatment Works (p)	1,069					17	35	53	75	180	889	
PUBLIC HEALTH SERVICE												
Water Pollution Control			1				1	1	2	2	6	
DEPARTMENT OF AGRICULTURE												
Program of Conservation & Improvement Measures for Grassland & Cropland	11,896	321	159	159	159	369	506	548	604	2,345	9,071	
Program for Forest & Forest Range Lands	844	3		3	3	99	130	154	173	562	276	
Program for Stabilizing Measures for Small Watercourses	3,054					50	100	151	213	574	2,540	
Program to Improve Drainage on Agricultural Lands	819	124	63	63	63	65	65	70		404	228	
Program of Soil Surveys & Land Classification	100				20	10	10	10	10	60	40	
Program of Research and Investigation	1,026	1				55	128	96	96	375	650	
Program of Extension Education	601				5	10	12	14	17	58	543	
Subtotal - Dept. of Agriculture	18,340	449	225	225	250	658	954	1,043	1,188	4,318	13,348	
DEPARTMENT OF THE INTERIOR												
U. S. Geological Survey												
Topographic surveys and mapping			3					50	100	150	300	
			3							3		

## MINNESOTA

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958
				1953	1954	1955	1956	1957	1958		
DEPARTMENT OF THE INTERIOR (Continued)											
Fish and Wildlife Service											
Management of Fish & Wildlife Resources:											
Adm. of Fish & Game Laws			6	6	8	6	7	8	7	42	
Mammal & Bird Reservations			50	53	52	77	78	78	78	416	
Control of Predatory Animals and Inj. Rodents			3	3		4	4	4		23	
Investigation of Fish and Wildlife Resources:											
Research on Fish & Fisheries				35	40	16	16	16	16	139	
Construction:											
Nat. Wildlife Facilities			25		10	21	21	11	11	74	
Federal Aid in Wildlife Restoration			90	89	90	90	90	90	90	539	
Federal Aid to Sportfishing			28	27	28	28	28	28	28	167	
Regional Office Adm.			2	1	1	2	2	2	2	10	
Subtotal			204	214	233	244	246	237	236	1,410	
Bureau of Mines											
Minerals and Metals											
Nonmetallic Minerals					2	2	2	2	2	12	
Bureau of Land Management											
Land Classification and Resources Inventory											
Regular Program		12		2	2	2	1	1	1	8	2
Special MRB Program		10			3	3	3	1		10	
Cadastral Surveys											
Regular Program		21		1	2	1	2	1	2	9	11

## **MINNESOTA**

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

## MISSOURI

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
STATE OF MISSOURI												
Agricultural Extension			208	208	208	208	208	208	208	1,248		
Agricultural Research			168	168	168	168	168	268	268	1,208		
Studies and Investigations			15	15	15	15	15	15	15	90		
Game, Fish and Forestation (t)			1,169	1,169	1,169	1,169	1,169	1,169	1,169	7,014		
Parks			247	247	255	255	260	260	265	1,542		
Geological Investigations and Topographic Mapping			197	200	200	200	200	200	200	1,200		
Adm. Land and Water Resources			30	30	30	30	30	30	30	180		
Public Health, Sanitation & Pollution			68	68	68	70	70	75	75	426		
Recreation			66	66	66	66	66	66	66	396		
Subtotal			2,168	2,171	2,159	2,181	2,186	2,291	2,196	13,304		
State Government Subdivisions												
County Contribution to Extension Work			288	288	288	288	288	288	288	1,728		
Municipal Sewage Treatment (u)			200	600	1,000	1,500	1,200	1,200	1,200	6,700		
Flood Control	9,006	135	160	345	366	400	350	600	100	2,161	5,650	
Watershed Treatment Works (p)	40,454			35	210	225	382	582	821	2,255	38,199	
Subtotal	49,460	135	648	1,268	1,864	2,413	2,220	2,670	2,409	12,844	43,849	
Federal Grants-in-Aid												
Agricultural Extension			468	468	468	468	468	500	500	2,872		
Agricultural Research			199	199	199	199	199	400	450	1,646		
Public Health			110	110	110	110	110	150	150	740		
Subtotal			777	777	777	777	777	1,050	1,100	5,258		
Subtotal - State of Missouri	(c) 49,460	135	3,593	4,216	4,820	5,371	5,183	6,011	5,805	31,406	43,849	

MISSOURI

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Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Redd. after F.Y. 1958
				1953	1954	1955	1956	1957	1958		
PUBLIC HEALTH SERVICE											
Water Pollution Control			9	14	14	18	18	18	22	108	
Mosquito Control Investigations			2	1				5	5	11	
Subtotal - Public Health Service			11	15	14	18	18	27	27	119	
FEDERAL POWER COMMISSION											
River Basin Surveys			8	8	10	11	12	13	13	67	
Power Requirements and Supply Studies			7	7	7	8	9	10	10	51	
Licensed Project Work			3	3	4	4	4	5	5	25	
Subtotal - Federal Power Comm.			18	18	21	23	25	28	28	143	
DEPARTMENT OF COMMERCE											
Coast and Geodetic Survey		5	4	4	65	36	20	54		179	
Weather Bureau											
Flood Forecasting Service		35	35	40	45	47	51	56	56	295	
Hydroclimatic Network		6	6	12	16	19	22	26	24	119	
Basic Data Processing and Analysis		5	5	14	19	19	19	19	7	97	
Supporting Services		8	8	25	40	40	40	40	40	225	
Inland Waterways Corporation		300	300	300	300	300	300	300	300	1,800	
Economic Information, Studies & Surveys		692	471	410	624	624	402	360	367	2,787	
Subtotal - Dept. of Commerce		1,051	829	805	1,109	1,085	854	855	794	5,502	

## MISSOURI

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
<b>CORPS OF ENGINEERS</b>												
Chariton River	2,740	750	292	1,200	498							1,698
Missouri River (Kansas City to Mouth)	115,713	88,481	2,956	8,500	4,000	4,000	4,000	3,000	776	24,276		
Pomme de Terre Reservoir	21,922	252	200	2,500	7,000	7,700	4,270					21,470
Missouri River Agricultural Levees	88,000	10,550	2,341	3,000	4,500	4,700	5,000	7,300	8,021	32,521	42,588	
Osage River Basin	159,800		215	2,000	5,000	10,000	15,000	20,000	25,000	77,000	(cc)	82,585
Gasconade River Basin	61,299	17										61,282
Grand River Basin	181,991											181,991
Minor Tributaries of the Missouri River	48,400											48,400
Preliminary Examination and Surveys	1,500	700		100	100	50						250 550
Kansas Citys (See Kansas)												
Osage River Lock and Dam	658	658										
Gasconade River	139	139										
<b>Subtotal - Corps of Engineers</b>	<b>682,162</b>	<b>101,547</b>	<b>6,004</b>	<b>17,300</b>	<b>21,098</b>	<b>26,450</b>	<b>28,270</b>	<b>30,300</b>	<b>33,797</b>	<b>157,215</b>	<b>417,396</b>	
<b>DEPARTMENT OF AGRICULTURE</b>												
Program of Conservation and Improvement Measures for Grassland and Cropland	166,549	6,760	3,857	4,457	4,957	5,166	7,081	7,665	8,449	37,775	118,157	
Program for Forest and Forest Range Lands	31,576	257	133	383	633	803	1,014	1,192	1,312	5,337	25,849	
Program for Stabilizing Measures for Small Watercourses	115,583			100	600	642	1,092	1,664	2,346	6,444	109,139	
Program to Improve Drainage on Agricultural Lands	8,624	523	299	299	399	500	537	651	695	3,081	4,721	
Program of Soil Surveys and Land Classification	1,400	8	8	20	50	50	65	65	65	315	1,069	

# MISSOURI

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				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF AGRICULTURE (Contd)												
Program of Research and Investigation	3,078	68	29	75	122	268	387	322	352	1,526	1,455	
Program of Extension Education	10,213			60	70	85	167	209	257	848	9,365	
Rural Electrification (Special Studies only)	18				18						18	
Subtotal - Dept. of Agriculture	337,041	7,616	4,326	5,394	6,849	7,514	10,343	11,768	13,476	55,344	269,755	
DEPARTMENT OF THE INTERIOR												
U. S. Geological Survey												
Topographic Surveys and Mapping				160	270	255	235	270	300	350	1,680	
Water Resources Investigations				32	98	100	114	162	194	208	876	
Supervision of Mining and Oil and Gas Leases				3	4	5	5	5	5	5	29	
Subtotal				195	372	360	354	437	499	563	2,585	
Fish and Wildlife Service												
Management of Fish and Wildlife Resources												
Administration of Fish & Game Laws				13	12	16	13	14	17	14	86	
Mammal and Bird Reservations				91	44	53	79	79	78	79	412	
Control of Predatory Animals and Injurious Rodents				6	7	7	7	?	?	8	45	
Investigations of Fish and Wildlife Resources												
Research on Fish and Fisheries					125	80	62	62	63	63	455	
Research on Birds and Mammals				6	6	6	6	6	7	7	38	
Construction												
National Wildlife Facilities				60	61	21	31	32	21	21	207	
Federal Aid in Wildlife Restoration				146	146	146	146	146	146	146	876	
Federal Aid to Sportfishing				45	44	45	45	45	45	45	269	

MISSOURI

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

## MISSOURI

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

## MONTANA

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
STATE OF MONTANA												
State Soil Conservation Committee			1	1	1	1	1	1	1		6	
State Forester & State Forestry Board			5	6	6	6	5	6	5		34	
State Water Conservation Board		250	250	600	600	600	600	600	600		3,250	
Department of Fish and Game	656	650	700	700	700	700	700	700	700		4,200	
Montana Extension Service		239	279	302	302	302	302	302	302		1,789	
Montana Agricultural Experiment Station		620	993	1,030	1,010	1,010	1,010	1,010	1,010		6,063	
State Board of Health												
Water Pollution Control			4	4	9	9	13	13	13		61	
Public Water Supplies			4	8	8	8	8	8	8		40	
Mosquito Control			4	4	9	8	8	8	8		41	
Construction Camp & Recreational Area Sanitation		1	9	9	8	5	8	3	3		31	
Subtotal	656	1,778	2,243	2,663	2,645	2,652	2,656	2,656	2,656		15,515	
Local Governmental Subdivisions												
Municipal Sewage Treatment				370	370	1,000	370	370	370		2,850	1,590
Flood Control	518	20		70	90	54	44	60	80		398	100
Watershed Treatment Works (p)	28,151				35	138	278	424	599		1,474	26,677
Subtotal	28,669	20		440	495	1,192	692	854	1,049		4,722	28,367
Federal Grants-in-Aid for Public Health				18	15	15	15	15	15		90	
Subtotal - State of Montana	(c) 28,669	676	1,796	2,698	3,173	3,852	3,359	3,525	3,720		20,327	28,367
PUBLIC HEALTH SERVICE												
Water Pollution Control				8	11	11	15	15	18		88	
Mosquito Control Investigations				6	10	10	15	15	15		80	
Subtotal - Public Health Service				14	21	21	30	30	33		168	

**MONTANA**

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IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958
				1953	1954	1955	1956	1957	1958		
FEDERAL POWER COMMISSION											
River Basin Surveys			16	16	18	19	20	24	24		121
Power Requirements and Supply			11	11	12	14	17	19	19		92
Licensed Project Work			6	6	7	7	7	7	7		41
Subtotal - Federal Power Comm.			33	33	37	40	44	50	50		254
DEPARTMENT OF COMMERCE											
Coast and Geodetic Survey		20	15	39	50	69	105	15	150		428
Weather Bureau											
Flood Forecasting and Water Supply Forecasting Service		9	9	20	25	30	35	40	45		195
Hydroclimatic Network		16	16	30	38	46	54	62	56		286
Basic Data Processing and Analysis		7	7	20	27	27	27	27	14		142
Supporting Services		5	5	25	35	45	45	45	45		240
Inland Waterways Corporation (See Under Missouri)											
Economic Information, Studies and Surveys		152	104	90	137	137	89	79	81		613
Subtotal - Dept. of Commerce		209	156	224	312	354	355	268	391		1,904
CORPS OF ENGINEERS											
Saco, Milk River	77	1									76
Wibaux, Beaver Creek		42				-					42
Missouri River at Fort Peck	156,900	130,643	2,276	1,025	6,565	9,365	7,026				23,981
Havre, Montana		2,075	102	1	312	900	761				1,973
Miles City, Montana		1,141			201	350	400	190			1,141

# MONTANA

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				1953	1954	1955	1956	1957	1958			
<b>CORPS OF ENGINEERS (Continued)</b>												
Preliminary Examination & Surveys	250	100		30	20	10				60	90	
Harlem, Milk River	76	5						71			71	
Billings, Yellowstone River	3,389					70	124	600	1,400	2,194	1,195	
Forsyth	265	265										
Tributaries of Missouri River	1,800											1,800
Glasgow	17	17										
<b>Subtotal - Corps of Engineers</b>	<b>166,032</b>	<b>131,132</b>	<b>2,277</b>	<b>1,568</b>	<b>7,835</b>	<b>10,606</b>	<b>7,411</b>	<b>600</b>	<b>1,400</b>	<b>29,420</b>	<b>3,203</b>	
<b>DEPARTMENT OF AGRICULTURE</b>												
Program of Conservation & Improvement Measures for Grassland and Cropland	107,066	3,778	1,995	1,995	2,245	2,821	4,552	4,927	5,431	21,971	79,322	
Program for Forest and Forest Range Lands	169,500	2,110	1,165	1,165	1,615	3,740	5,127	6,441	7,062	25,150	141,075	
Program for Stabilizing Measures for Small Watercourses	80,432				100	344	792	1,210	1,710	4,156	76,276	
Program in Aid of Irrigation	47,436	974	421	421	471	805	994	1,494	1,866	6,051	39,990	
Program of Soil Surveys and Land Classification	5,800	30	20	35	100	200	260	260	260	1,115	4,635	
Program of Research and Investigation	7,695	165	99	186	403	530	868	833	855	3,672	3,759	
Program of Extension Education	7,810				20	106	143	167	206	642	7,168	
Rural Electrification (Special Studies Only)		15			15						15	
<b>Subtotal - Dept. of Agriculture</b>	<b>425,754</b>	<b>.7,057</b>	<b>3,700</b>	<b>3,802</b>	<b>4,969</b>	<b>8,546</b>	<b>12,736</b>	<b>15,329</b>	<b>17,390</b>	<b>62,772</b>	<b>352,225</b>	
<b>DEPARTMENT OF THE INTERIOR</b>												
Bureau of Reclamation - Region 6												
Canyon Ferry Unit	29,491	14,432	8,906	4,429	893	831					6,153	
Charley Creek Unit	249	17	20	135	46						181	31

# MONTANA

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IN THOUSANDS OF DOLLARS

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				1953	1954	1955	1956	1957	1958			
<b>DEPARTMENT OF THE INTERIOR (Continued)</b>												
Bureau of Reclamation - Region 6 (Contd)												
Colgate Unit	449	45	25	15	190	115	5	30	24	379		
Crow Creek Unit	1,553	121	140	500	742	22	10	10	8	1,292		
East Bench Unit	20,130	281	200	90	150	410	3,490	7,190	4,790	16,120	3,529	
Elm Coulee Unit	495	41	18	17	20	200	150	5	20	412	24	
Hardin Unit	11,892	380	201	236	150	150	100	75	50	761	10,550	
Helena Valley Unit	4,588	190	70	100	620	2,040	1,200	215	91	4,266	62	
Lower Marias Unit	60,622	2,337	506	4,200	7,273	11,414	11,725	7,025	5,730	47,367	10,412	
Marsh Unit	1,002	100	2	2						2	898	
Missouri Diversion Unit	101,743	1,301	200	5,000	9,150	6,350	5,650	7,300	15,900	49,350	50,892	
Moorhead Unit	25,530	1,621	40	66	3,000	11,000	8,491	1,312			23,869	
Nickwall Unit	779	45	15	385	250						638	81
Sadie Flat Unit	1,992	179	14	2								1,797
Savage Unit	505	471		2	27							29
Seven Sisters Unit	1,418	73	20	45	250	750	85	6	60	1,196	129	
Sidney Unit	601	147	37	260	144	4	9				417	
Stipesk Unit	1,616	162	25	50	275	850	95	7	60	1,337	92	
Yellowtail Unit	99,290	1,893	381	6,812	18,160	26,527	27,063	12,620	4,616	95,798	1,218	
Clarks Fork Division	997	35	40	150	250	202		20	20		642	280
Helena-Great Falls Div.	17,775	41	125	130	193	166	500	3,300	4,020	8,309	9,300	
Jefferson Division	20,056	277	148	50	150	100	200	500	2,000	3,000	16,631	
Judith Division	6,525	1	1	10	90	90	23				213	6,310
Little Missouri Division	7,871	43	16		47	46	8				101	7,711

**MONTANA**

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				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR (Continued)												
Bureau of Reclamation-Region 6 (Contd.)												
Lower Bighorn Division	12,059	25	25		200	200	200	163		763	11,246	
Marias Division	143,605	153	31	60	110	110	141		100	521	142,900	
Milk Division	13,311	34	2	60	210	209	150	750	3,000	4,379	8,896	
Missouri-Souris Division	10,844	275	44	63	135	127	1,018	958	13	2,314	8,211	
Montana Pumping Division	2,067	148	87	35	75	110	308	556	358	1,442	390	
Musselshell Division	130	2	1	10	105	12					127	
Powder Division	9,160	250	80	30	40	50	75	100	100	395	8,435	
Sun-Teton Division	19,580	158	58	75	89		200	300	900	1,564	17,800	
Three Forks Division	89,055	672	131	160	195	200	387	500	3,550	4,992	83,260	
Tongue Division	6,767	100	136	88	85	85	6	27	40	331	6,200	
Transmission Division	22,969	237	430	1,490	767	1,712	2,438	3,797	3,193	13,397	8,905	
Yellowstone Division	60,027	291	63	151	290	460	1,067	763	1,403	4,134	55,539	
Buffalo Rapids Proj. - 1	2,556	1,830	352	222	152						374	
Buffalo Rapids Proj. - 2	2,082	1,554	95	111	132	123	67				433	
Fort Peck Project	14,776	7,364	1,235	306	384	189	80			959	5,218	
Milk River Proj. (Fresno)	2,000	1,826	26								148	
Sun River Project	9,671	9,517	41	40	51	22					113	
Milk River Project - R&B	660	294	137	160	69						229	
Sun River Project - R&B	36	13	16	7							7	
Subtotal	838,524	48,976	14,145	25,754	45,159	64,879	64,941	47,529	50,046	298,308	477,095	

**MONTANA**

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				1953	1954	1955	1956	1957	1958		
DEPARTMENT OF THE INTERIOR (Continued)											
U. S. Geological Survey											
Topographic surveys and mapping			234	630	620	820	840	1,100	1,150	5,160	
Geologic and mineral resource surveys and mapping			322	615	607	656	738	746	746	4,108	
Water Resources Investigation			189	434	486	497	501	508	502	2,928	
Classification of lands			30	35	35	35	39	40	40	224	
Supervision of mining and oil and gas leases			58	59	65	68	70	75	75	412	
Subtotal			833	1,773	1,813	2,076	2,188	2,469	2,513	12,832	
Fish and Wildlife Service											
Management of fish and wildlife resources:											
Adm. of fish & game laws			23	20	19	19	19	20	20	117	
Propagation & distrib. of food fishes			68	129	205	205	205	205	205	1,154	
Mammal & bird reservations			78	83	85	90	100	105	110	573	
Control of predatory animals and inj. rodents			206	1,029	433	284	192	190	191	2,319	
Investigations of fish and wildlife resources											
Research on fish & fisheries					75	30	30	30	30	225	
Research on birds & mammals			4	4	4	4	5	5	5	27	
Construction:											
Fish facilities			194	619	6					625	
Nat. wildlife facilities			23	25	133	143	116	114	103	634	
Federal Aid in Wildlife Restoration			414	165	185	185	185	185	185	1,090	
Federal Aid to Sportfishing			45	55	60	60	60	60	60	355	
Regional Office Administration			33	41	42	42	45	45	46	261	

# MONTANA

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				1953	1954	1955	1956	1957	1958		
DEPARTMENT OF THE INTERIOR (Continued)											
Fish and Wildlife Service (Continued)											
River-Basin Studies:											
Cooperation with Corps of Engineers	9	3	7	7	6	6	7	6	39		
Cooperation with Bureau of Recl.	187	33	58	61	61	61	64	59	364		
Basin-Wide Studies	174	20	24	23	25	8	19	7	106		
Special Investigations	10										
Subtotal	380	1,144	2,334	1,293	1,154	1,032	1,049	1,027	7,889		
Bureau of Mines											
Fuels											
Coal (q)		2	16	16	16	16	21	26	111		
Petroleum and gas		2	57	50	50	50	50	50	307		
Minerals and metals											
Ferrous metals		4	6	6	7	7	7	7	40		
Nonferrous metals		10	12	12	13	13	13	14	77		
Nonmetallic minerals		17	21	21	21	21	21	22	127		
Control of coal deposit fires			10	10	10	10	10	10	60		
Health and Safety		10	15	15	15	15	15	15	90		
Administration		5	5	5	5	6	6	6	33		
Subtotal	50	142	135	137	138	143	150	145	245		
Bureau of Land Management											
Management of Lands & Resources:											
Grazing		100	145	137	125	125	125	124	781		
Forestry		13	10	11	10	9	9	9	58		

MONTANA

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				1953	1954	1955	1956	1957	1958		
DEPARTMENT OF THE INTERIOR (Continued)											
Bureau of Land Management (Continued)											
Resource Development & Rehabilitation											
Soil & Moisture Cons.	3,921	483	80	150	210	287	362	457	562	2,028	1,330
Range Improvement			42	106	116	116	116	116	116	686	620
Fire Control			28	10	10	9	9	8	8		54
Lease and Disposal of Lands and Resources			39	39	44	44	44	43	43		257
Land Classification and Resource Inventory											
Regular Program			8	12	12			16	16		87
Special MRB Program	783	136	50	77	85	95	105	100	80	542	60
Cadastral Surveys											
Regular Program			23	277	450	453	467	552	654		2,853
Special MRB Program		921	30	75	50	50	37	45	45		302
Administrative Services			19	31	31	31	31	30	30		184
Subtotal	4,709	1,540	432	932	1,156	1,235	1,321	1,501	1,687	7,832	2,010
Bureau of Indian Affairs											
Health, Education and Welfare			1,607	2,923	3,109	3,615	3,357	3,095	2,058		18,157
Resources Management				900	2,207	2,322	2,341	2,357	2,408	2,318	13,953
Construction				422	1,131	2,567	3,511	2,218	2,070	2,025	13,520
General Admin., Expense				290	342	342	342	342	342		2,052
MRB-Survey & Investigations		408	83	123	93	76	30				322
Subtotal		408	3,302	6,726	8,433	9,885	8,304	7,923	6,733	48,004	

**MONTANA**

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

# NEBRASKA

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
STATE OF NEBRASKA												
Agricultural Program												
Extension Service			430	440	729	733	733	732	732		4,099	
Experiment Station			557	637	700	700	715	715	715		4,182	
Agriculture and Inspection			197	197	197	197	197	197	197		1,182	
Archeology, Anthropology, etc.			21	21	21	21	21	21	21		126	
Highways				475							475	
Game, Fish, Forestation and Parks			900	900	900	900	900	900	900		5,400	
Geological Investigations			29	29	30	30	30	25	25		169	
Water Administration			140	142	145	145	150	150	150		882	
Stream Pollution Work, Sanitation, etc.			15	15	25	25	20	20	15		120	
Subtotal			2,289	2,856	2,747	2,751	2,766	2,760	2,755		16,635	
State Government Subdivisions												
Municipal Pollution Abatement			50	1,000	2,450	4,000	6,000	1,500	1,500		16,450	4,500
Flood Control	2,860	1,112	50	128	620	500	400	100	50		1,798	
Watershed Treatment Works (p)	97,826		3	101	347	377	875	1,449	1,911		5,060	92,763
Subtotal	100,686	1,112	103	1,229	3,417	4,877	7,275	3,049	3,461		23,308	97,263
Federal Grant-in-Aid												
Agricultural Program												
Extension Service			535	535	667	671	671	671	671		3,886	
Experiment Station			203	230	300	300	310	310	310		1,760	
Highways				475							475	
Game, Fish, Forestation and Parks			400	400	400	400	400	400	400		2,400	

## NEBRASKA

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Req'd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
STATE OF NEBRASKA (Contd)												
Federal Grant-in-Aid (Contd)												
Stream Pollution Work, Sanitation			15	15	20	20	15	15	15	100		
Subtotal			1,153	1,655	1,387	1,391	1,396	1,396	1,396	8,621		
Subtotal - State of Nebraska	100,686 <sup>(c)</sup>	1,112	3,545	5,740	7,551	9,019	11,437	7,205	7,612	48,564	97,263	
Public Power Program (bb)			5,770	4,246	12,757	4,139	2,700	2,885	2,695	29,422		
PUBLIC HEALTH SERVICE												
Water Pollution Control			12	17	17	21	21	25	25	126		
Mosquito Control Investigations			10	10	20	20	20	20	20	110		
Subtotal - Public Health Service			22	27	37	41	41	45	45	236		
FEDERAL POWER COMMISSION												
River Basin Surveys			11	11	12	13	15	17	17	85		
Power Requirements and Supply Studies			8	8	17	11	12	12	12	65		
Licensed Project Work			4	4	5	5	5	6	6	31		
Subtotal - Federal Power Comm.			23	23	27	29	32	35	35	181		
DEPARTMENT OF COMMERCE												
Coast and Geodetic Survey	81	158	100	66	14	20	10	100	310			
Weather Bureau												
Flood Forecasting and Water Supply Forecasting Service		27	28	35	40	45	50	55	58	283		
Hydroclimatic Network		11	12	22	28	34	40	45	42	211		
Basic Data Processing and Analysis		7	7	20	27	27	27	27	14	142		

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				1953	1954	1955	1956	1957	1958		
DEPARTMENT OF COMMERCE (Continued)											
Weather Bureau (Continued)											
Supporting Services		6	6	30	40	42	42	42	42	238	
Inland Waterways Corporation (See under Missouri)											
Economic Information, Studies and Surveys		472	322	280	426	426	275	245	250	1,902	
Subtotal - Dept. of Commerce		604	533	487	627	588	454	424	506	3,086	
CORPS OF ENGINEERS											
Indianola		68	68								
Platte River at Schuyler		75	75								
Omaha, Nebraska	6,760	5,731	14								1,015
Bartley, Nebraska	137	71	55	11							11
Pierce, Nebraska	191			11	180						191
Waterloo, Nebraska	96			7	89						96
West Point, Nebraska	141			11	130						141
Preliminary Exam. and Surveys	1,200	650		150	125	125					400
Battle Creek, Nebraska	312			10	10	292					312
Giles Creek, Nebraska	455			15	15	425					455
Harlan County Reservoir	46,730	36,796	9,470	325	54	85					464
Norfolk, Nebraska	2,434			75	550	1,100	709				2,434
Missouri River, Kensler's Bend to Sioux City, Iowa	10,005	2,846	941		2,500	2,000	1,000	718			6,218
Missouri River Agricultural Levees	16,300	3,560	665	1,000	2,000	3,000	4,000	2,000	575		12,575
Gavins Point	61,174	565	4,104	11,000	19,000	19,000	7,505				56,505

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				1953	1954	1955	1956	1957	1958			
CORPS OF ENGINEERS (Contd)												
Missouri River, Sioux City to Kansas City	179,068	100,683	5,873	13,000	10,000	10,000	10,000	11,000	11,000	65,000	7,512	
Kansas Basin	630										630	
Tributaries of the Missouri River	69,309										69,309	
Red Willow Reservoir	11,075										11,075	
Subtotal - Corps of Engineers	406,660	151,045	17,122	19,615	34,653	36,027	26,709	20,223	11,575	148,802	89,691	
DEPARTMENT OF AGRICULTURE												
Prog. of Conservation & Improvement Measures for Grassland and Cropland	190,341	10,847	5,597	5,997	6,797	7,404	8,092	8,760	9,655	46,705	127,192	
Program for Forest and Forest Range Lands	33,736	166	103	133	353	750	961	1,139	1,259	4,595	28,872	
Program for Stabilizing Measures for Small Watercourses	279,502	81	90	290	990	1,077	2,500	4,140	5,460	14,457	264,874	
Program in Aid of Irrigation	51,115	588	264	264	264	505	715	1,470	2,295	5,513	44,750	
Program to Improve Drainage on Agriculture Lands	4,611	166	74	74	74	108	194	276	347	1,073	3,298	
Program of Soil Surveys and Land Classification	2,270	73	41	62	90	90	100	100	100	542	1,614	
Program of Research and Investigation	6,670	174	82	249	501	554	943	751	729	3,727	2,687	
Program of Extension Education	9,012			40	85	106	179	209	257	876	8,136	
Supporting Credit Program (Administrative only)												
Rural Electrification (Special Studies only)	25			25							25	
Subtotal - Dept. of Agriculture	577,282	12,095	6,251	7,134	9,154	10,594	13,684	16,845	20,102	77,513	481,423	

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Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR (Continued)												
Bureau of Reclamation - Region 7 (Contd.)												
Upper Niobrara Division	2,700											2,700
Valentine Division	17,286											17,286
Subtotal	607,695	67,468	13,526	11,662	12,270	14,955	22,006	32,208	24,232	117,333	409,368	
U. S. Geological Survey												
Topographic Surveys and Mapping			400	700	700	700	700	600	600	4,000		
Geologic and Mineral Resource Surveys and Mapping			40	76	75	82	92	93	93	511		
Water Resources Investigations			284	657	723	754	768	785	780	4,477		
Classification of Lands			1	2								2
Supervision of Mining and Oil and Gas Leases			3	5	5	5	5	7	7	34		
Subtotal			728	1,440	1,513	1,541	1,565	1,485	1,480	9,024		
Fish and Wildlife Service												
Management of Fish and Wildlife Resources												
Adm. of Fish and Game Laws			19	18	28	23	25	31	25	150		
Propagation and Distribution of Food Fishes			27	40	60	60	65	60	60	345		
Mammal and Bird Preservations			68	94	107	107	107	107	107	629		
Control of Predatory Animals and Injurious Rodents			13	29	24	24	18	17	15	127		
Investigations of Fish and Wildlife Resources												
Research on Fish and Fisheries				20	20	12	12	13	13	90		
Construction												
Fish Facilities			33	200	180	100	50	25	20	575		
Nat. Wildlife Facilities				11	26	26	16	16	16	111		
Federal Aid in Wildlife Restoration			247	247	247	247	248	248	248	1,485		

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				1953	1954	1955	1956	1957	1958		
DEPARTMENT OF THE INTERIOR (Continued)											
National Park Service											
Activities with Program -- Bureau of Reclamation											
Planning and Investigation	452	126	31	40	30	30	40	40	40	220	75
Construction (r)	(2,079)	(83)	(105)	(25)	(148)	(22)	(22)	(160)	(340)	(717)	(1,174)
Construction Planning and Consultant Services	211			3	20	2	2	21	43	91	120
Historical and Archeological Surveys and Salvage Activities with Program -- Corps of Engineers	62	12	5	10	10	5	5	3	2	35	10
Planning & Advisory Services	8	1		1	1	1	2	1	1	7	
Historical and Archeological Surveys and Salvage	13	10	3								
Basin-Wide Survey	101	1	10	19	23	24	9	7	8	90	
Development and Management	397			14	16	17	16	39	34	136	261
Development in National Park Service Areas	1,682		49	154	1,174	68	52	96	89	1,633	
Smithsonian Institution											
Activities with Program -- Bureau of Reclamation											
Investigations	49	36	6	2						2	5
Excavations	26				3	3	3	3	2	2	16
Activities with Program -- Corps of Engineers											
Investigations	8	8									
Subtotal	3,009	194	104	246	1,277	150	129	209	219	2,230	481
Subtotal - Dept. of Interior	610,717	68,125	15,349	14,897	16,664	18,115	25,170	35,329	27,337	137,512	409,849
TOTAL - STATE OF NEBRASKA	(c) 1,695,345	232,981	42,845	47,923	68,713	74,413	77,527	80,106	67,212	415,894	1,078,226

## NORTH DAKOTA

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IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
STATE OF NORTH DAKOTA (a)												
Agricultural Experiment Stations		1,009	507	507	600	600	700	700	700	3,807		
Agricultural Extension Work		357	290	235	205	205	205	205	205	1,260		
Highways		1,750	1,000	1,800	1,350	650	500	500	500	5,300		
Game and Fish		698	416	416	416	416	416	416	416	2,496		
Water Commission		1,165	290	290	295	295	300	300	300	1,780		
Soil Conservation		37	20	20	25	25	25	30	30	155		
Agriculture and Labor		354	99	99	99	99	100	100	120	617		
Public Health		35	35	35	35	42	47	50	50	262		
Research Foundation		48	19	19	19	19	19	19	19	114		
Recreational and Parks		15	36	50	60	75	75	75	75	410		
Subtotal	(dd)	5,528	2,712	3,471	3,107	2,426	2,387	2,395	2,415	16,201		
Federal Grant-in-Aid												
Agricultural Experiment Stations		383	100	100	100	100	100	100	100	600		
Public Health		85	36	36	40	44	48	50	50	268		
Subtotal		468	136	136	140	144	148	150	150	868		
Local Subdivision Funds												
Municipal Sewage Treatment				100	250	250	1,000	200	200	200	2,100	
Flood Control		155	60	33							62	
Watershed Treatment Works (p)	31,670				17	85	313	476	672	1,563	30,107	
Subtotal	31,825		60	133	250	267	1,085	513	676	872	3,663	30,169
Subtotal - North Dakota	31,825	6,056	3,081	3,857	3,514	3,655	3,048	3,221	3,437	20,732	30,169	

#### **NORTH DAKOTA**

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**NORTH DAKOTA**  
BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Rec'd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR												
Bureau of Reclamation - Region 6												
Cannonball Unit	12,612	597	40	180	1,645	3,350	3,360	2,444	837	11,816	159	
Cartwright Unit	277	116	135	26							26	
Crosby-Mohall Unit	265,953	1,852	905	650	600	600	700	4,000	15,000	21,550	241,645	
Devils Lake Unit	21,023	84	71	125	50	50	200	1,500	5,000	6,925	13,943	
Dickinson Unit	1,655	1,311	39	91	139	75					305	
Fort Clark Unit	601	101	425	58							58	17
Hancock Flats Unit	1,446	10	9	4							4	1,423
Heart Butte Unit	5,728	3,868	350	720	511	215	64				1,510	
Jamestown Unit	10,690	246	151	1,000	2,060	2,000	1,116				6,176	4,117
Painted Woods Unit	1,149	85	20	17	415	559					991	53
Square Butte Unit	395	3	5	10							10	377
Cannonball Division	4,888	39	30	13	118	100	150	1,500	2,000	3,881	938	
Garrison Division	19,898	167	134	166	160	100	70	50	25	571	19,026	
Grand Division (See South Dakota)												
Knife Division	11,765	46	12	35	45	17	150	150	1,000	1,397	10,310	
Missouri-Souris Division	17,483	293	44	63	35	27	168	160	160	613	16,533	
North Dakota Pump. Div.	12,857	121	20	31	125	116	1,070	2,065	1,706	5,113	7,603	
Transmission Division	77,922	12,911	2,942	4,630	9,910	6,330	7,000	10,575	6,340	44,785	17,284	
Buford-Trenton Project	620	612	8									
Subtotal	466,962	22,463	5,340	7,819	15,813	13,539	14,048	22,444	32,068	105,731	333,428	

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				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR (Contd)												
U. S. Geological Survey												
Topographic Surveys and Mapping			250	400	400	300	315	330	345	2,090		
Geologic and Mineral Resource Surveys and Mapping			113	216	213	230	259	262	262	1,442		
Water Resources Investigations			98	226	254	259	259	261	258	1,517		
Classification of Lands			5	4	4	4				12		
Supervision of Mining, Oil & Gas Leases			5	5	5	5	5	5	5	31		
Subtotal			471	851	876	798	838	859	870	5,092		
Fish & Wildlife Service												
Management of Fish and Wildlife Resources												
Adm. of Fish and Game Laws			19	19	30	25	27	33	28	162		
Propagation and Distribution of Food Fishes			14	15	16	17	18	20	30	116		
Mammal & Bird Reservations			273	156	183	209	209	208	208	1,173		
Control of Predatory Animals and Injurious Rodents			14	22	19	19	16	16	15	107		
Investigations of Fish and Wildlife Resources												
Research on Fish and Fisheries				40	37	23	23	22	22	167		
Construction												
Fish Facilities						100	75	75	10	10	270	
Nat. Wildlife Facilities			14	120	52	79	79	52	53	435		
Federal Aid in Wildlife Restoration			186	186	187	187	186	186	186	1,118		
Federal Aid to Sportfishing			30	30	30	30	30	31	31	182		
Regional Office Administration			5	6	6	6	6	6	6	36		

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				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR (Contd)												
Fish & Wildlife Service (Contd)												
River Basin Studies												
Cooperation with Corps of Engineers		52	11	16	17	16	16	17	16	98		
Cooperation with Bur. of Reclamation		145	35	38	40	40	40	42	40	240		
Cooperation with U. S. Dept. of Agriculture			3	3	3	3	2	3	2	16		
Basin-Wide Studies		57	10	24	24	12	22	9	18	109		
Subtotal		254	614	675	744	741	749	655	665	4,229		
Bureau of Mines												
Fuels												
Coal (q)		180	310	310	310	330	340	350	1,950			
Petroleum and Gas				5	5	19	20	20	20	99		
Minerals and Metals												
Nonmetallic Minerals			2	6	6	6	6	6	6	36		
Mineral Research, Unclassified			7	7	9	9	11	11	11	58		
Control of Coal Deposit Fires			15	20	15	15	15	15	15	95		
Health and Safety			6	10	11	11	12	12	12	68		
Administration			9	10	11	11	11	12	12	67		
Subtotal		219	368	367	381	405	416	426	2,363			
Bureau of Land Management												
Management of Lands and Resources												
Grazing			1	1	1	1	1	1	1	6		

**NORTH DAKOTA**  
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**BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE**

IN THOUSANDS OF DOLLARS

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				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR (Contd)												
Bureau of Land Management (Contd)												
Resource Development and Rehabilitation												
Soil and Moisture Conservation	31		7	1	7	5	5				24	
Range Improvement			1	1	5	5	5	5	5		26	10
Lease and Disposal of Lands and Resources			7	7	7	7	7	6	6		40	
Land Classification and Resource Inventory												
Regular Program			1	7	7	4	3	3	2		24	
Special MRB Program	33	20	4	6	3						9	
Cadastral Surveys												
Regular Program			2	7	7	14	14	1	1		44	
Special MRB Program		704	15	10	21	20	45	73	73		242	
Administrative Services			3	4	4	4	4	2	2		20	
Subtotal	64	724	43	49	61	60	84	91	90		435	10
Bureau of Indian Affairs												
Health, Education and Welfare			1,593	2,030	2,067	2,117	2,117	2,167	2,167		12,665	
Resources Management			261	827	1,111	1,040	1,207	1,205	1,205		6,595	
Construction			859	4,113	1,157	1,026	859	707	609		8,471	
General Admn. Expense			63	79	83	83	83	83	83		494	
MRB Survey and Investigations	398	67	62	12	13						87	
Subtotal		398	2,843	7,111	4,430	4,279	4,266	4,162	4,064		28,312	

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				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR (Continued)												
National Park Service												
Activities with Program -- Bureau of Reclamation												
Planning and Investigation	194	46	12	16	16	20	20	12	12	96	40	
Construction (r)	(653)	(13)	(3)	(80)	(44)	(77)	(13)			(214)	(423)	
Construction Planning and Consultant Services	85			10	6	10	2			28	57	
Historical & Archeological Surveys and Salvage	65	9	4	10	10	10	5	5	2	42	10	
Activities with Program -- Corps of Engineers												
Planning & Advisory Services	8	3		1	1	1	1	1		5		
Historical & Archeological Surveys and Salvage	297	19	26	40	40	40	35	30	27	212	40	
Basin-Wide Survey	27	1	1	3	8	6	5	2	1	25		
Development and Management	29			1	2	1	2	4	3	1	13	15
Development in National Park Service Areas	752		13	42	122	301	94	93	87	739		
Smithsonian Institution												
Activities with Program -- Bureau of Reclamation												
Investigations	41	16	3	5	3	3	2	2	2	17	5	
Excavations	5			5							5	
Activities with Program -- Corps of Engineers												
Investigations	79	46		10	8	3	3	2	2	28	5	
Excavations	256		31	40	40	35	35	30	30	210	15	
Subtotal	1,838	140	91	184	255	431	206	180	164	1,420	187	
Subtotal - Dept. of Interior	468,865	23,979	9,621	17,057	22,546	20,229	20,596	28,807	38,347	147,582	333,625	
TOTAL - STATE OF NORTH DAKOTA	1,078,493	135,972	62,161	67,407	73,802	67,922	49,409	51,240	53,315	363,125	593,529	

## SOUTH DAKOTA

SIX YEAR PROGRAM FOR MISSOURI RIVER  
BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958
				1953	1954	1955	1956	1957	1958		
STATE OF SOUTH DAKOTA											
Agricultural Program											
Research (Exp. Stations)			653	653	695	695	767	767	789	4,366	
Extension Service			308	308	321	337	347	360	370	2,043	
State-Wide Services			66	66	78	78	87	87	92	423	
Highways	303	39	88	176						176	
Game, Fish, Forest & Parks	3,300	1,500	380	840	940	940	940	940	940	5,540	
Geological Investigations			75	66	80	80	80	80	80	480	
Administration, Land & Water Resources			47	49	51	55	60	60	65	345	
Public Health, Sanitation & Pollution			27	33	38	39	46	48	50	254	
Studies & Investigations			32	35	30	26	26	26	26	169	
Subtotal	3,603	1,539	2,176	2,240	2,233	2,250	2,353	2,373	2,212	13,861	
State Government Subdivisions											
Relocation County Roads	10			10						10	
Municipal Pollution Abatement	5,055	1,055	481	1,070	216	216	216	216	216	2,150	1,369
Flood Control	5,138	138									5,000
Watershed Treatment Works (p)	31,670				17	85	313	476	672	1,563	30,107
Subtotal	41,873	1,193	481	1,080	233	301	529	692	888	3,723	36,476
Federal Grant-in-Aid											
Extension Service			408	406	406	406	432	432	462	2,564	
Experiment Stations			212	212	213	213	213	215	215	1,281	
Highways	386	50	112	224						224	
Game, Fish & Parks (Pittman-Robertson)			180	180	180	180	180	180	180	1,080	

**SOUTH DAKOTA****SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN** prepared by **MISSOURI BASIN INTER-AGENCY COMMITTEE**  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
STATE OF SOUTH DAKOTA (Continued)												
Federal Grant-in-Aid (Continued)												
Public Health & Sanitation			25	23	27	30	38	44	46	208		
Subtotal	386	50	937	1,045	826	829	863	871	903	5,337		
Subtotal - State of South Dakota	45,562	2,782	3,594	4,365	3,292	3,380	3,745	3,936	4,003	22,721	36,475	
PUBLIC HEALTH SERVICE												
Water Pollution Control			16	14	14	17	17	20	20	102		
Mosquito Control Investigations			10	10	10	15	15	15	15	80		
Subtotal - Public Health Service			26	24	24	32	32	35	35	182		
FEDERAL POWER COMMISSION												
River Basin Surveys			10	10	11	12	13	15	15	76		
Power Requirements and Supply Studies			7	7	8	9	10	11	11	56		
Licensed Project Work			4	4	4	4	4	5	5	26		
Subtotal - Federal Power Comm.			21	21	23	25	27	31	31	158		
DEPARTMENT OF COMMERCE												
Coast and Geodetic Survey		93	187	160	54	50	65	120	20	469		
Weather Bureau												
Flood forecasting service			12	12	32	40	45	50	46	45	258	
Hydroclimatic network			10	10	17	21	26	30	34	31	159	
Basic data processing and analysis			6	6	18	24	24	24	24	12	126	
Supporting Services			4	4	20	32	32	32	32	32	180	

## SOUTH DAKOTA

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF COMMERCE (Continued)												
Inland Waterways Corporation (See under Missouri)												
Economic Information, Studies & Surveys		197	134	117	178	178	115	103	104	795		
Subtotal - Dept. of Commerce		322	353	364	349	355	316	359	244	1,987		
CORPS OF ENGINEERS												
Fall River Basin	4,479	1,762	647	427	525	837	181			2,070		
Fort Randall Reservoir	197,300	71,073	16,784	37,500	25,000	13,942				76,442		
Oahe Reservoir	285,500	7,997	5,373	6,230	25,000	37,500	37,500	37,500	37,500	146,230	90,900	
Rig Bend Reservoir	49,500				150	500	5,000	16,000	16,000	37,650	11,850	
Examination and Surveys	800	650		40	40					80	70	
Belle Fourche	37	37										
Missouri River	53,000										53,000	
Tributaries of Missouri River	50,000										50,000	
Subtotal - Corps of Engineers	640,616	81,519	55,804	44,297	50,715	52,780	42,681	53,500	53,500	297,413	205,820	
DEPARTMENT OF AGRICULTURE												
Program of Conservation and Improvement Measures for Grassland and Cropland	154,652	9,177	4,721	4,721	4,971	5,297	6,575	7,118	7,846	36,528	104,226	
Program for Forest and Forest Range Lands	57,668	1,006	652	652	702	1,564	1,926	2,231	2,438	9,513	46,497	
Program for Stabilizing Measures for Small Watercourses	90,486				50	244	895	1,360	1,920	4,469	86,017	
Program in Aid of Irrigation	20,784	405	209	209	259	301	343	454	459	2,025	18,145	
Program to Improve Drainage on Agricultural Lands	4,472	554	296	296	296	291	328	333	324	1,868	1,754	
Program of Soil Surveys and Land Classification	4,200	44	12	68	130	155	190	190	190	923	3,221	

# SOUTH DAKOTA

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
<b>DEPARTMENT OF AGRICULTURE (Continued )</b>												
Program of Research and Investigation	6,670	119	62	103	268	428	731	628	718	2,936	3,553	
Program of Extension Education	6,007				20	106	119	139	172	556	5,451	
Supporting Credit Program (Administrative only)												
Rural Electrification (Special Studies only)	25			25						25		
<b>Subtotal - Dept. of Agriculture</b>	<b>344,964</b>	<b>11,305</b>	<b>5,952</b>	<b>6,074</b>	<b>6,696</b>	<b>8,386</b>	<b>11,107</b>	<b>12,513</b>	<b>14,067</b>	<b>58,843</b>	<b>268,264</b>	
<b>DEPARTMENT OF THE INTERIOR</b>												
Bureau of Reclamation - Region 6												
Angostura Unit	13,439	10,551	1,247	1,175	8	5	4	4	4	1,200	441	
Bixby Unit	12,976	1,323	- 90								11,743	
Cane Unit	219,389	2,479	925	1,298	1,894	7,138	11,707	2,919	1,012	25,968	190,027	
Rapid Valley Unit	11,972	210	321	2,135	5,260	2,854	1,057	96	27	11,436	5	
Shadehill Unit	10,675	7,299	136	402	101	7	7	7	5	529	2,711	
Bad Division	6,337	1			51	53				104	6,232	
Cheyenne Division	7,071	162	33	30	55	61	54		20	220	6,656	
Grand Division	13,257	43			22	22	22	19		85	13,129	
James Division	5,043	124	203	240	150	150	68	60	60	748	3,968	
Morreau Division	21	21		No additional activities planned								
South Dakota Pump. Div.	8,449	67			73	78	82	118	40	391	7,991	
White Division	15,235	245	46	43	95	125	200	200	1,900	2,563	12,381	
Transmission Division	71,148	4,893	9,250	27,730	19,387	7,592	2,602	1,543	919	53,773	3,223	
Belle Fourche Project-R&B	373	269	101	3						3		
<b>Subtotal</b>	<b>395,385</b>	<b>27,687</b>	<b>12,171</b>	<b>27,056</b>	<b>27,104</b>	<b>18,085</b>	<b>15,823</b>	<b>4,965</b>	<b>3,987</b>	<b>97,020</b>	<b>258,507</b>	

## SOUTH DAKOTA

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR (Continued)												
U. S. Geological Survey												
Topographic surveys and mapping		375	605	605	505	510	420	430	3,075			
Geologic and mineral resource surveys and mapping		66	126	124	134	151	152	152	839			
Water Resources Investigations		151	353	393	405	418	430	429	2,428			
Classification of Lands		6	6	5	5	3	2	-	21			
Supervision of Mining and Oil and Gas Leases		5	5	5	5	5	5	6	31			
Subtotal		603	1,095	1,132	1,054	1,087	1,009	1,017	6,394			
Fish and Wildlife Service												
Management of fish & wildlife resources:												
Adm. of fish & game laws		20	20	29	25	26	32	27	159			
Propagation & distribution of food fishes		28	35	45	50	53	55	55	293			
Mammal & bird reservations		114	137	66	81	81	81	81	527			
Control of predatory animals & inj. rodents		15	54	48	40	32	29	35	218			
Investigations of fish and wildlife resources;												
Research on fish & fisheries			40	38	23	22	22	23	168			
Construction:												
Fish facilities		100	100	100	25	20	20	10	275			
Nat. wildlife facilities		19		5	16	11	11	10	53			
Federal Aid in Wildlife												
Restoration		231	231	231	231	231	231	231	1,336			
Federal Aid to Sportfishing		40	40	41	40	40	41	41	243			
Regional Office Admin.		6	6	6	6	6	7	7	38			

**SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN** prepared by **MISSOURI BASIN INTER-AGENCY COMMITTEE**  
**SOUTH DAKOTA**  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Recd after F.Y. 1958
				1953	1954	1955	1956	1957	1958		
DEPARTMENT OF THE INTERIOR (Continued)											
Fish and Wildlife Service (Continued)											
River Basin Studies:											
Coop. w/Corps of Engineers	78	10	15	15	15	14	15	14	14	88	
Coop. w/Bureau of Reclamation	125	43	45	47	47	47	42	46	281		
Coop. w/U. S. Dept. of Agriculture		7	6	7	6	7	7	6	39		
Basin-Wide Studies		71	28	22	11	15	22	11	17	98	
Sub-Total	274	661	751	689	620	612	611	583	3,866		
Bureau of Mines				55		55					
Fuels											
Coal (q)		55	135	120	120	80	80	55	600		
Petroleum and gas				5	5	5	7	7	7	36	
Minerals and Metals											
Ferrous metals		4	12	20	21	21	21	22	147		
Nonferrous metals		6	6	6	8	9	8	9	45		
Nonmetallic minerals		71	143	143	143	145	145	147	866		
Mineral research, unclassified		9	9	11	11	13	13	13	70		
Control of coal deposit fires			10	10	10	10	10	10	60		
Health and safety		6	10	10	10	10	10	10	60		
Administration		8	10	10	11	11	11	12	65		
Subtotal	104	370	335	339	315	305	285	1,949			

## SOUTH DAKOTA

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR (Continued)												
Bureau of Land Management												
Management of Lands & Resources:												
(1) Grazing				2	3	4	3	3	3	3	19	
Resource Development & Rehabilitation												
(1) Soil & Moisture Conservation	70				10	10	10	10	5	5	50	20
(2) Range Improvement					1	4	10	10	10	10	10	54
Fire Control												
Lease and Disposal of Lands and Resources				6	6	7	7	7	7	6	40	
Land Classification and Resource Inventory												
(1) Regular Program					2	8	8	4	3	3	3	29
(2) Special MRB Program	64	34	10		10	10						20
Cadastral Surveys												
(1) Regular Program				5	4	25	40	30	6	5	1	113
(2) Special MRB Program				179	62	133	190	145	120	100	100	788
Administrative Services					5	4	5	6	5	5	4	29
Subtotal	134	213	101		204	285	214	174	133	132	1,142	50
Bureau of Indian Affairs												
Health, Education and Welfare				4,057	4,913	5,127	5,257	5,257	5,387	5,387	31,328	
Resources Management					705	2,469	2,852	2,808	2,826	2,928	2,887	16,770
Construction					228	1,137	944	567	2,355	1,929	719	7,651
General Admin. Expense					328	372	390	390	390	390	390	2,322
MRB-Survey & Investigations				413	137	191	123	94	62			470
Subtotal				413	5,455	9,082	9,436	9,116	10,890	10,634	9,383	58,541

# SOUTH DAKOTA

## SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR (Continued)												
National Park Service												
Activities with Program -- Bureau of Reclamation												
Planning & Investigation	175	15	13	16	15	18	16	16	16	97	50	
Construction (r)	(552)	(19)	(72)	(3)	(58)	(273)	(74)	(20)	(20)	(448)	(13)	
Construction Planning and Consultant Services	62			1	8	37	10	2	2	60	2	
Historical & Archeological Surveys and Salvage	69	16	5	10	10	5	5	5	3	38	10	
Activities with Program -- Corps of Engineers												
Planning and Advisory Services	10	5		1	1	1	1	1			5	
Historical & Archeological Surveys and Salvage	401	49	35	40	40	40	40	35	32	227	90	
Basin-Wide Survey	66		4	8	21	17	7	5	4	62		
Development and Management	23		1	4	2	4	6	5	1	22		
Development in National Park Service Areas	1,911		88	295	409	507	206	204	202	1,823		
Smithsonian Institution												
Activities with Program -- Bureau of Reclamation												
Investigations	72	45	2	5	5	3	2	3	2	20	5	
Excavations	23			5	5	3					13	10
Activities with Program -- Corps of Engineers												
Investigations	157	99	6	10	10	5	3	2	2	32	20	
Excavations	312		57	40	40	40	35	35	35	225	30	
Subtotal	3,281	229	211	435	566	680	331	313	299	2,624	217	
Subtotal - Dept. of the Interior	398,800	28,816	19,306	38,993	39,547	30,108	29,232	17,970	15,686	171,536	258,774	
TOTAL - STATE OF SOUTH DAKOTA	1,442,800	124,744	85,056	94,138	100,646	95,066	87,140	88,344	87,566	552,900	769,934	

## WYOMING

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Req'd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
STATE OF WYOMING (w)												
Agricultural Program												
Main Experiment Station			105	105	105	105	105	105	105	630		
State Farms			72	72	72	72	72	72	72	432		
Extension Service			190	190	190	190	190	190	190	1,140		
Studies and Investigations			22	22	22	22	25	25	25	141		
Highway Modification			200	100	70	60	50	50	50	380		
Game, Fish, Forest Fire Protection			870	870	870	870	870	870	870	5,220		
Geological Investigations (Mineral)			7	7	7	7	7	7	7	42		
Administration - Water Resources			35	35	36	36	38	38	38	221		
Stream Gaging and Snow Surveys			26	26	27	27	27	27	27	161		
Underground Water Studies			7	7	8	8	10	10	10	53		
Stream Pollution, Sanitation, etc.			13	14	14	14	14	14	14	84		
Commerce and Industry Commission			58	58	60	60	60	60	60	358		
Natural Resources Board			74	74	75	75	75	75	75	449		
Subtotal			1,679	1,580	1,556	1,546	1,543	1,543	1,543	9,311		
Federal Grant-in-Aid												
Public Health				8	8	8	8	8	8	48		
Local Subdivision Fund												
Municipal Pollution Abatement			1,130	230	400	1,000	500	200	200	2,530	630	
Flood Control	257			20	40	9	97	91		257		
Watershed Treatment Works (p)	21,113				35	69	208	317	448	1,077	20,036	
Subtotal	21,390			1,130	250	475	1,078	805	608	648	3,864	20,666
Subtotal - State of Wyoming	21,390		2,817	1,838	2,039	2,632	2,356	2,159	2,199	13,223	20,666	

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

## WYOMING

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
<b>CORPS OF ENGINEERS</b>												
Greybull	660			143	517							660
Dayton, Yellowstone River	108							8	100			108
Monarch, Yellowstone River	213					14	199					213
Sheridan, Yellowstone River	2,097				14	114	300	1,000	669	2,097		
Buffalo, Yellowstone River	572						338	234				572
Exams and Surveys	200	55										145
<b>Subtotal - Corps of Engineers</b>	<b>3,850</b>	<b>55</b>		<b>143</b>	<b>531</b>	<b>128</b>	<b>845</b>	<b>1,334</b>	<b>669</b>	<b>3,650</b>		<b>145</b>
 <b>DEPARTMENT OF AGRICULTURE</b>												
Program of Conservation and Improvement Measures for Grassland and Cropland	59,481	2,136	1,220	1,320	1,470	1,845	2,529	2,737	3,017	12,918	43,207	
Program for Forest and Forest Range Lands	68,586	1,413	1,026	1,076	1,376	1,916	2,369	2,750	3,009	12,496	53,651	
Program for Stabilizing Measures for Small Watercourses	60,324					100	196	595	907	1,280	3,078	57,246
Program in Aid of Irrigation	29,128	924	521	621	721	769	867	926	1,071	4,975	22,708	
Program to Improve Drainage on Agricultural Lands												
Program of Soil Surveys and Land Classification	2,500	31	7	38	70	80	115	115	115	533	1,929	
Program of Research and Investigation	6,670	70	40	222	342	440	734	691	717	3,146	3,414	
Program of Extension Education	4,205				10	20	63	83	98	120	394	3,811
Supporting Credit Program (Administrative only)												
Rural Electrification (Special Studies only)	15					15						15
<b>Subtotal - Dept. of Agriculture</b>	<b>230,909</b>	<b>4,574</b>	<b>2,814</b>	<b>3,287</b>	<b>4,114</b>	<b>5,309</b>	<b>7,292</b>	<b>8,224</b>	<b>9,329</b>	<b>37,555</b>	<b>185,966</b>	

**WYOMING**

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958
				1953	1954	1955	1956	1957	1958		
<b>DEPARTMENT OF THE INTERIOR</b>											
Bureau of Reclamation - Region 6											
Bighorn Unit	1,441	39	44	29	303	494	183	86	70	1,165	193
Bluff Unit	590	23	10	172	228	109	16	15	13	553	4
Boysen Unit	34,821	31,207	2,504	1,110							1,110
Hanover Unit	2,420	122	20	498	883	478	136	133	106	2,234	44
Kaycee Unit	10,080	269	75	35	100	725	3,742	3,850	850	9,302	434
Keyhole Unit	4,642	3,273	1,288	81							81
Owl Creek Unit	3,388	677	191	1,064	1,160	296					2,520
Paintrock Unit	1,629		20								1,609
Piney Unit	2,475	158	75	40	400	1,100	542	100	20	2,202	40
Shell Creek Unit	4,782	16	38	30	69	121	2,830	1,583	40	4,673	55
Shoshone Extensions Unit	42,666	777	300	400	1,169	3,637	6,222	5,748	6,729	23,905	17,684
Bighorn Basin Division	2,251	248			153	82	341	173	499	1,248	755
Clarks Fork Division	86,195	229	180	141	216	415	7,444	14,375	15,195	37,786	48,000
Cheyenne Division (See South Dakota)											
Powder Division	21,636	555	169	75	262	294	340	3,175	8,420	12,566	8,346
Tongue Division	13,594	105	135	85	85	80		50	54	354	13,000
Transmission Division	10,259	3,259	1,504	159	1,782	295	475	1,360	1,425	5,496	
Wind Division	31,101	275	193	200	258	650	2,200	3,725	4,724	11,757	18,876
Riverton Project - Constr.	24,635	17,646	1,770	2,052	1,693	1,179	295				5,219
Riverton Project - R & B	1,966	869	663	434							434
Shoshone Project - Constr.	16,778	13,870	469	287	112	171	131				701

**WYOMING**

SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE  
IN THOUSANDS OF DOLLARS

Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958	
				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR (Continued)												
Bureau of Reclamation - Region 6 (Contd)												
Shoshone Project - R & B	395	272	65	58							58	
Subtotal	317,744	73,889	9,713	6,950	8,873	10,126	24,897	34,373	38,145	123,364	110,778	
Bureau of Reclamation - Region 7												
Kortes	14,593	14,497	96									
Glendo	44,384	530	550	6,300	12,500	14,840	9,664				43,304	
Transmission Lines (Also Colorado and Nebraska)	49,053	9,150	2,224	3,346	6,531	7,831	445				18,153	19,526
Kendrick	31,319	23,617	2,552	4,141	730	279					5,150	
Guernsey Unit	2,750			37	50	750	1,200	713			2,750	
North Platte (See Nebraska)												
Subtotal	142,099	47,794	5,422	13,824	19,811	23,700	11,309	713			69,357	19,526
Subtotal - Bureau of Recl.	459,843	121,683	15,135	20,774	28,684	33,826	36,206	35,086	38,145	192,721	130,304	
U.S. Geological Survey												
Topographic Surveys and Mapping			400	700	700	800	800	300	900	4,800		
Geologic and Mineral Resource Surveys and Mapping			244	465	460	496	559	564	565	3,109		
Water Resources Investigations			177	397	449	454	440	436	424	2,600		
Classification of Lands			33	44	45	45	52	52	52	290		
Supervision of Mining and Oil and Gas Leases			145	155	155	160	160	165	165	960		
Subtotal			999	1,761	1,809	1,955	2,011	2,117	2,106	11,759		
Fish and Wildlife Service												
Management of Fish and Wildlife Resources												
Adm. of Fish and Game Laws			6	6	6	7	6	7	6	38		
Propagation and Distribution of Food Fishes			46	42	42	42	43	43	43	255		

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				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR (contd)												
Fish and Wildlife Service (contd)												
Mammal and Bird Reservations			2	15	12	12	13	13	12	77		
Control of Predatory Animals and Injurious Rodents			46	101	101	101	102	102	102	609		
Investigation of Fish and Wildlife Resources:												
Research on Fish and Fisheries			21	55	90	60	60	60	60	385		
Construction:												
Fish Facilities			14	44	31	6	35	12	13	141		
Nat. Wildlife Facilities				78	55	40	40	20	20	253		
Federal Aid in Wildlife Restoration			149	149	149	149	149	148	148	892		
Federal Aid to Sportfishing			32	32	32	32	32	33	32	193		
Regional Office Admin.			9	14	13	12	11	12	11	73		
River Basin Studies:												
Cooperation with Corps of Engineers			1	3	4	3	3	4	3	20		
Cooperation with Bureau of Reclamation			150	53	73	78	78	81	76	464		
Basin-Wide Studies			97	18	13	6	5	7	5	42		
Subtotal			248	396	625	619	547	579	540	532	3,442	
Bureau of Mines				5	5		5	7	7	5		
Fuels												
Coal (q)				10	161	161	161	166	171	186	1,006	186
Petroleum and Gas (x)				120	226	196	196	190	190	190	1,188	190
Synthetic Liquid Fuels (y)				450	643	454	454	456	456	460	2,923	460

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				1953	1954	1955	1956	1957	1958			
DEPARTMENT OF THE INTERIOR (contd)												
Bureau of Mines (contd)												
Minerals and Metals												
Ferrous Metals			47	179	40	41	41	41	42	384		
Nonferrous Metals				2	2	2	13	3	3	4	17	
Nonmetallic Minerals				13	13	13	13	13	13	78		
Control of Coal Deposit Fires				55	55	62	60	60	60	355		
Health and Safety				20	27	27	27	27	27	162		
Construction				16	(a) 233	62	60			345		
Administration				14	15	15	16	16	17	17	96	
Subtotal			747	1,554	1,030	1,021	972	978	999	6,554		
Bureau of Land Management												
Management of Lands and Resources												
Grazing				111	150	142	128	129	129	129	807	
Forestry					19	15	16	14	13	14	86	
Resource Development and Rehabilitation												
Soil & Moisture Conservation	6,943	565	103	200	350	450	600	700	800	3,100	3,175	
Range Improvement					62	120	205	275	325	375	425	1,725
Fire Control					28	10	10	9	9	8	8	54
Lease and Disposal of Lands and Resources					50	50	52	52	52	51	51	308
Land Classification and Resource Inventory												
Regular Program					8	12	13	16	17	16	15	89
Special MRB Program	1,179	511	69	98	109	106	96	80	70	559	40	

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Feature or Project	Estimated Total Cost	Costs to End of F.Y. 1951	1952 F.Y. Funds	Funds Required by Fiscal Years						Total Est. Costs 6 Yr. Program 1953-1958	Funds Reqd after F.Y. 1958
				1953	1954	1955	1956	1957	1958		
DEPARTMENT OF THE INTERIOR (contd)											
Bureau of Land Management (contd)											
Cadastral Surveys											
Regular Program			23	103	125	125	126	131	29	639	
Special MRB Program		117	2	57	40	40	35	35	35	242	
Administrative Services			22	35	35	35	34	32	32	203	
Subtotal	8,122	1,193	497	850	1,097	1,250	1,436	1,571	1,608	7,812	5,265
Bureau of Indian Affairs											
Health, Education and Welfare			136	192	254	224	221	224	215	1,330	
Resources Management			180	366	504	489	475	454	360	2,648	
Construction			47	249	539	496	503	513	508	2,808	
General Administrative Expense			23	74	74	74	74	74	74	444	
MRB Survey & Investigations		287	51	24	24	18	8			74	
Subtotal	287	437	905	1,395	1,301	1,281	1,265	1,157	7,304		
National Park Service											
Activities with Program — Bureau of Reclamation											
Planning and Investigation	371	175	15	23	19	20	25	20	14	121	60
Construction (r)	(1,174)		(45)	(58)	(216)	(90)	(64)	(63)	(222)	(713)	(416)
Construction Planning and Consultant Services	154			7	30	12	9	9	30	97	57
Historical & Archeological Surveys and Salvage	78	15	3	20	10	10	5	3	2	50	10
Basin-Wide Survey	103			6	18	31	25	9	7	7	97
Development and Management	159			1	15	21	25	24	23	24	132

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## NOTES

### SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE

- (a) 59 percent of North Dakota in Basin; 70 percent of state affected.
- (b) Includes approximately \$9,000 in funds transferred to Public Health Service by Bureau of Reclamation, Region 6, for Water Pollution Control Studies in James and Missouri-Souris Basins.
- (c) This figure includes only the estimated total costs of programs and measures for which a total estimate is available and excludes any estimate for continuing programs and other activities for which a total estimate is not available. This precludes a balancing of the figures in this line.
- (d) Figures include estimated costs of operation of boats and terminals on Missouri portion of inland waterways system, and are based on actual operations during the typical month of May 1950. The figures are not available on a state basis.
- (e) This item represents an allocation of the normal expenditures of certain Bureaus in the Department of Commerce to the Missouri Basin Area. These expenditures are not specifically earmarked for the Missouri Basin as such, but rather represent a calculated proportion of the total expenditures for certain activities of the Department related to economic information and development which benefit the Missouri Basin Area. Inasmuch as the Department's economic information and surveys are compiled primarily for the use of the business population, the total expenditures for related activities (minus administration expenses) are here allocated to the Missouri Basin Area on the basis of the percentage of the nation's business establishments that were in the Missouri Basin in 1948 (5.4 percent). Activities included are those of the Bureau of Foreign and Domestic Commerce (including the Offices of Domestic Commerce, Business Economics, Field Service and International Trade — the latter only in part) and of the Bureau of the Census. Not included in these estimates, although their work is related to the economic development of the Basin Area, are the expenditures of the Office of Technical Services, National Bureau of Standards, and other agencies of the Department.
- (f) Includes requirements for 17th Decennial Census and Census of Business.
- (g) Includes 17th Decennial Census, Census of Governments, and Census of Business (preparatory funds).
- (h) Includes Censuses of Governments, Business, Agriculture, and Manufactures.
- (i) Includes Censuses of Business, Agriculture, and Manufactures.
- (j) Includes Censuses of Business and Agriculture.
- (k) Includes preparatory funds for Census of Governments and 18th Decennial Census.
- (l) Not included in total and not distributed by States.
- (m) The figures for the U. S. Geological Survey show only Federal funds appropriated directly to the U. S. Geological Survey and Departmental Missouri Basin Project Funds transferred by Bureau of Reclamation to U. S. Geological Survey. These figures do not include any other funds transferred to the U. S. Geological Survey by Federal Agencies nor any State cooperative funds.
- (n) Does not include Defense Minerals Administration requirements or expenditures certified through Bureau of Mines - Geological Survey Field Teams.
- (o) Includes Pittman-Robertson and Clark-McNary funds.
- (p) Since a large proportion of benefits from measures primarily for reduction of floodwater and sediment damage will accrue offsite, it is contemplated that the non-federal cost will be met by a combination of the resources available to the governments of the states, counties, and other units of local government depending upon the circumstances surrounding the respective measures. (Table 23, H.D. 373, 81st Congress, 1st Session).

**NOTES (Con't.)**

**SIX YEAR PROGRAM FOR MISSOURI RIVER BASIN prepared by MISSOURI BASIN INTER-AGENCY COMMITTEE**

- (q) Research in coal utilization is to be conducted in the Coal Branch Laboratory located at the Denver Federal Center, and does not necessarily mean that the funds to be expended are identified entirely with Mineral Resources in the Missouri River Basin. However, results of some fundamental research will be applicable to coal and lignites within the Missouri Basin Area.
- (r) All figures included in parenthesis are non-add items which are included in the total for Bureau of Reclamation.
- (s) Includes proposed Shadow Mountain National Recreation Area and other Colorado - Big Thompson Reservoirs.
- (t) Includes Federal Grants-in-Aid.
- (u) Estimate based on materials being available.
- (v) The program of estimated expenditures includes the entire program of work for the agencies and institutions of South Dakota in the development of the land and water resources of the Missouri Basin in this State. The estimated expenditures include those for the normal functions of State Agencies, plus those funds required for accelerated programs of activity made by the River Program.
- (w) Approximately 76 percent of land area of Wyoming is located in the Missouri River Basin. Amounts shown are 76 percent of amounts available for the entire State for 1952, and are estimated for the years 1953 to 1958 inclusive on the basis of 76 percent of the estimated requirements for the entire State for this period.
- (x) The Petroleum and Natural Gas funds will be expended at the Experiment Station at Laramie, Wyoming (Missouri Basin). However, a large proportion of functions will pertain to natural resources from the Colorado River - Great Basin Region.
- (y) Oil Shale Research will be conducted at the Experiment Station at Laramie, Wyoming (Missouri Basin). However, all activity is in connection with resources located in the Colorado Basin.
- (z) New construction at Oil Shale Research Laboratory at Laramie, Wyoming, will be expended in the Missouri Basin. However, the resources to be benefited by such expenditure are wholly in the Colorado River Basin.
- (aa) Figures contained in "Development in National Park Service Areas" include development work on the following items: Construction of Roads and Trails - Buildings and Utilities, Historical and Archeological Research, Insect Control, Soil and Moisture Conservation, Blister Rust Control, Range Revegetation, Land Acquisition, and Weed Control.
- (bb) Program uncertain pending definite agreements as to marketing of power from Federal power plants.
- (cc) It is anticipated that additional amounts will be scheduled during the period 1953-1958 at a later date.
- (dd) Includes 4 years work.
- (ee) Appropriation for Corps of Engineers Projects is not available at time of preparation of this data; consequently estimated amounts have been used herein.





